PB87-105987

Water Resources Data for Colorado
Water Year 1985. Volume 2
Colorado River Basin above Dolores River

(U.S.) Geological Survey, Lakewood, CO

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U.S. Department of Commerce
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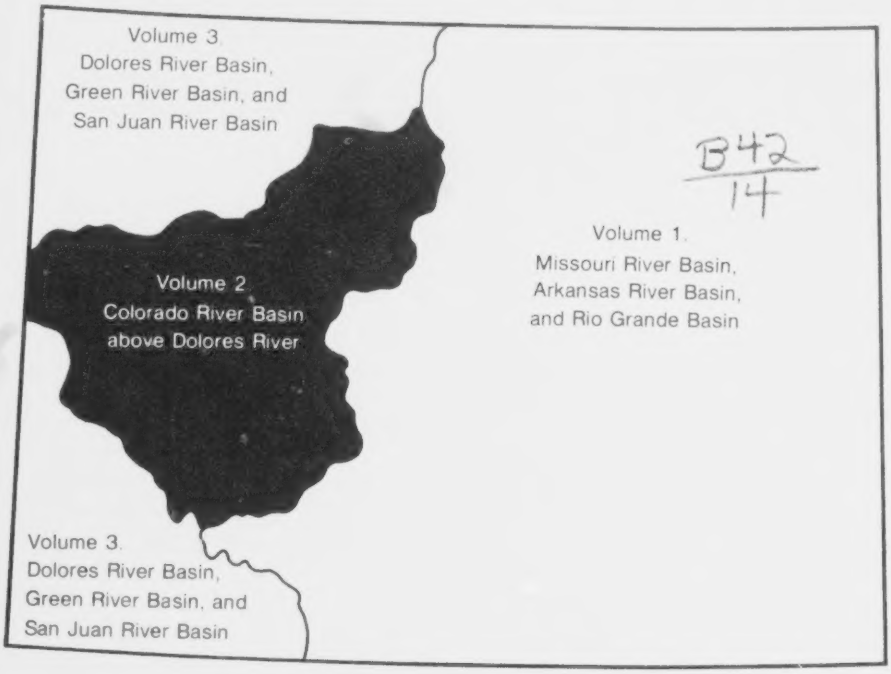
Water Resources Data Colorado

Water Year 1985

Volume 2. Colorado River Basin above Dolores River


Volume 3.
Dolores River Basin,
Green River Basin, and
San Juan River Basin
Volume 2.
Colorado River Basin
above Dolores River
Volume 1.
Missouri River Basin,
Arkansas River Basin,
and Rio Grande Basin
Volume 3.
Dolores River Basin,
Green River Basin, and
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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-85-2
Prepared in cooperation with the State of Colorado
and with other agencies

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CALENDAR FOR WATER YEAR 1985

1984

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U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

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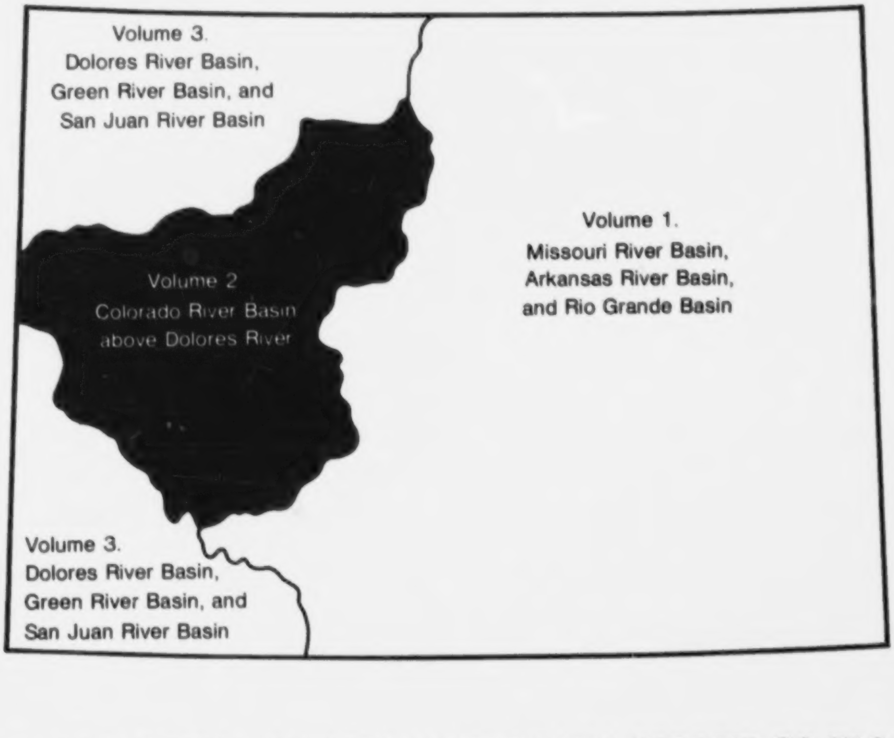
Water Resources Data Colorado Water Year 1985

Volume 2. Colorado River Basin above Dolores River

by R.C. Ugland, A.C. Duncan, R.G. Kretschman, and J.L. Ebling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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-85-2
Prepared in cooperation with the State of Colorado
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Colorado write to:

District Chief, Water Resources Division
U.S. Geological Survey
Box 25046, Mail Stop 415
Denver Federal Center
Lakewood, Co 80225

1985

PREFACE

This volume of the annual hydrologic data report of Colorado is one of a series of annual reports that document hydrologic data gathered from the U. S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Colorado are contained in three volumes:

Volume 1. Missouri River, Arkansas River, and Rio Grande basins in Colorado,
Volume 2. Colorado River Basin in Colorado, above the Dolores River, and
Volume 3. Dolores River, Green River, and San Juan River basins in Colorado.

This report is the culmination of a concerted effort by dedicated personnel of the U. S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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Water-resources data for Colorado for the 1985 water year consist of records of stage, discharge, and water quality of streams; stage, contents and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for 351 gaging stations, stage and contents of 25 lakes and reservoirs, 4 partial-record low-flow stations, peak flow information for 34 crest-stage partial record stations, and 1 miscellaneous site; water quality for 104 gaging stations and 256 miscellaneous sites; and water levels for 53 observation wells. Six pertinent stations in bordering States also are included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J. F. Blakey, District Chief. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies.

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Partial tables: (c) chemical, (b) biological, (m) microbiological, (s) sediment, (t) temperature)

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WATER RESOURCES DATA FOR COLORADO, 1985

VOLUME 2: COLORADO RIVER BASIN ABOVE THE DOLORES RIVER

By R.C. Ugland, A. C. Duncan, J. L. Ebling, and R. G. Kretschman

INTRODUCTION

Water-resources data for the 1985 water year for Colorado consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (volumes 1, 2, and 3) contains discharge records for 351 streamflow-gaging stations, stage and contents of 25 lakes and reservoirs, low-flow data for 4 partial-record stations, peak flow information for 34 crest-stage partial-record stations and 1 miscellaneous site; water-quality data for 104 streamflow-gaging stations and 256 miscellaneous sites; and water levels for 53 observation wells. Locations of lake- and streamflow-gaging stations and water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2, and locations of observation wells are shown in figure 3. Six pertinent stations in bordering States also are included in this report. The records were collected and computed by the Colorado District. These data were collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado and represent that part of the National Water Data System.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U.S. Geological Survey Water-Supply Papers entitled, "Surface-water Supply of the United States." These water-supply papers were published in an annual series through September 30, 1960, and then in 5-year compilations for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1955 in an annual series of water-supply papers entitled "Water Levels and Artesian Pressures in Wells in the United States," and from 1955 to the present time, in a 5-year series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be purchased from the U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, CO 80225.

For water years 1961 through 1970, streamflow data were released by the Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data on streamflow, water quality, and ground water are published in official survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CO-85-2." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

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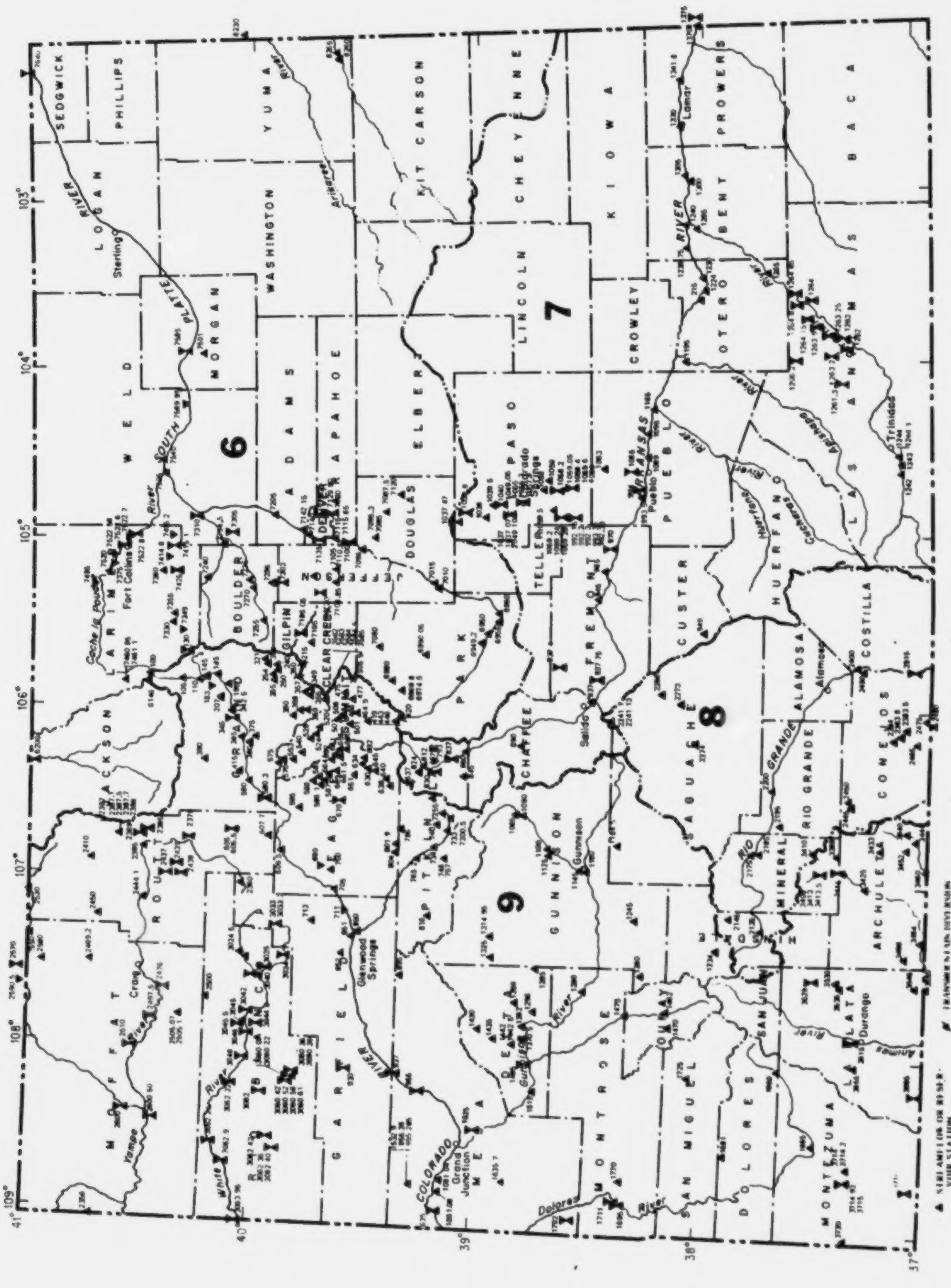

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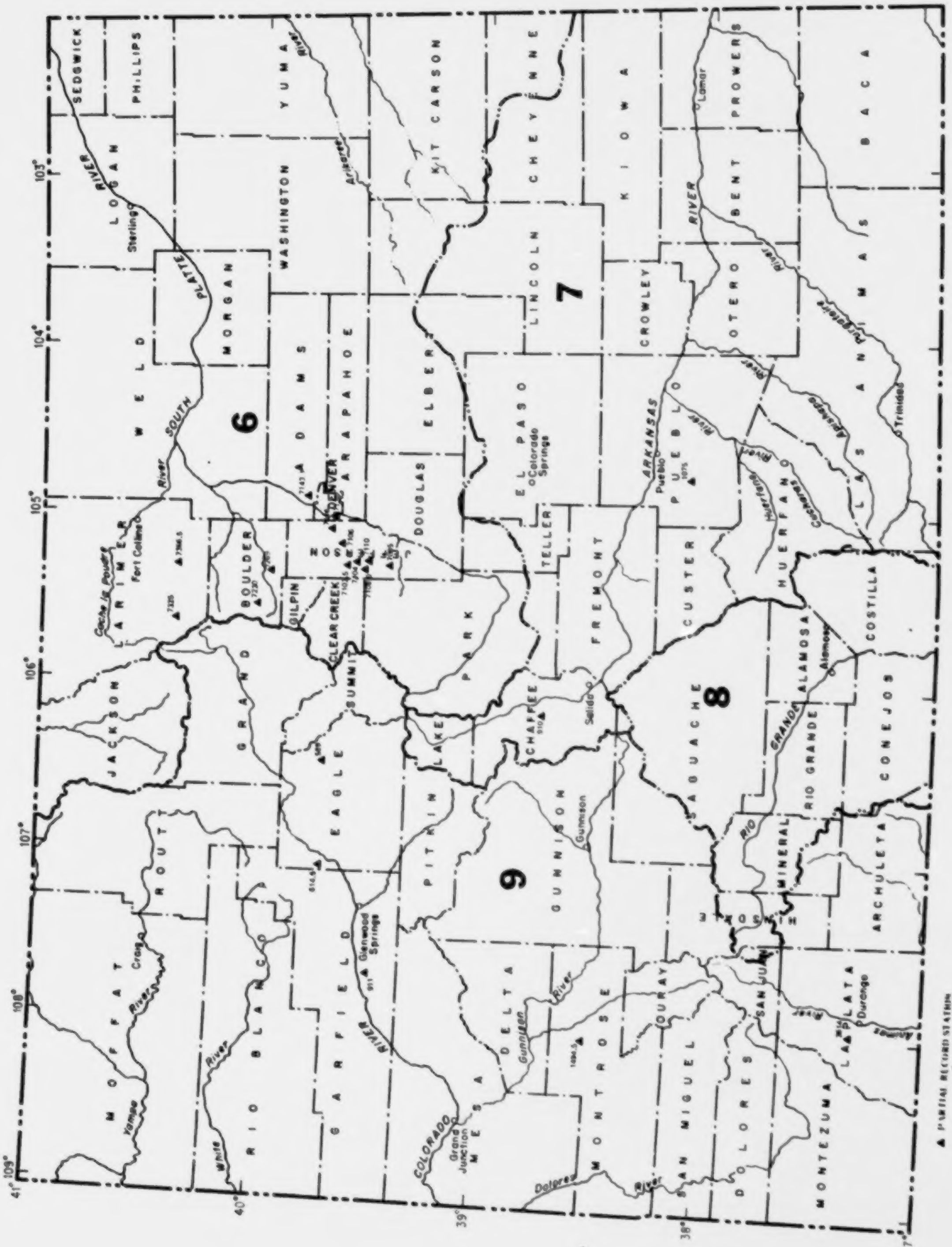
Figure 1.--Map showing locations of lakes and stream-gaging stations and water-quality stations in Colorado.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RIO BLANCO
GARFIELD
Glenwood Springs
EAGLE
PITKIN
GUNNISON
Gunnison
DELTA
MESA
Grand Junction
MONTROSE
OURAY
SAN MIGUEL
DOLORES
SAN JUAN
HINSDALE
MINERAL
ARCHULETA
LA PLATA
Durango
MONTEZUMA
6
7
8
9
SOUTH PLATTE RIVER
ARKANSAS RIVER
COLORADO RIVER
RIO GRANDE
Yampa River
White River
Gunnison River
Dolores River
Cache la Poudre River
41°
40°
39°
38°
37°
109°
108°
107°
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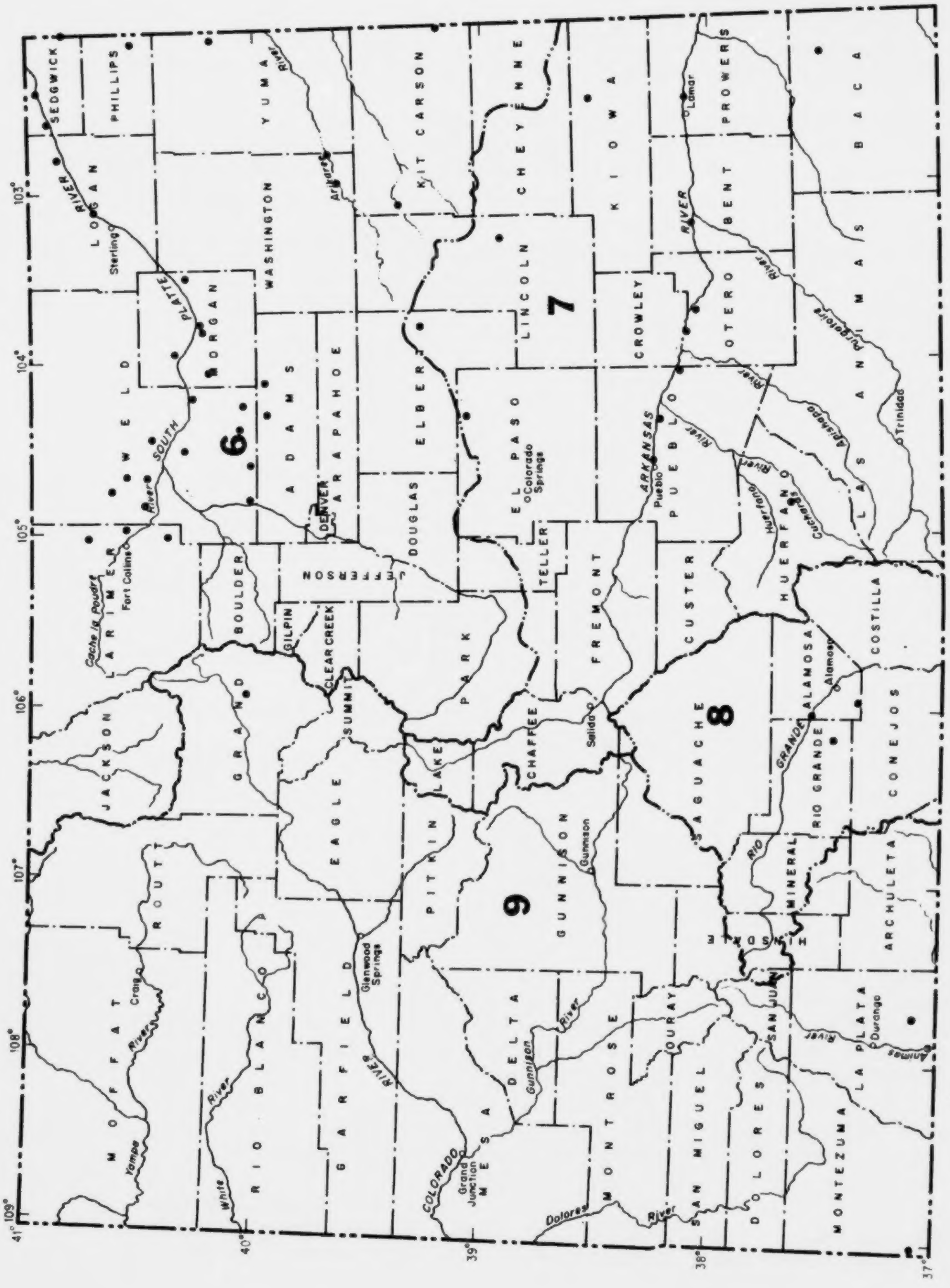
105°
104°
103°
0 25 50 75 100 MILES
▲ PARTIAL RECORD STATION

Figure 2.--Map showing locations of crest-stage partial-record stations in Colorado.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LOGAN
YUMA
WASHINGTON
KIT CARSON
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BACA
BENT
OTERO
CROWLEY
LINCOLN
ELBERT
EL PASO
DOUGLAS
ARAPAHOE
ADAMS
DENVER
MORGAN
WELD
LARIMER
BOULDER
GILPIN
JEFFERSON
CLEAR CREEK
TELLER
PUEBLO
FREMONT
CUSTER
HUERFANO
LAS ANIMAS
COSTILLA
ALAMOSA
CONEJOS
RIO GRANDE
SAGUACHE
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SUMMIT
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PITKIN
GARFIELD
RIO BLANCO
MOFFAT
ROUTT
JACKSON
GRAND
Sterling
Fort Collins
Denver
Colorado Springs
Pueblo
Lamar
Trinidad
Alamosa
Salida
Gunnison
Glenwood Springs
Grand Junction
Craig
Durango
SOUTH PLATTE RIVER
ARKANSAS RIVER
RIO GRANDE
COLORADO RIVER
Cache la Poudre
Arikaree
Yampa River
White River
Gunnison River
Dolores River
Animas River
Purgatoire River
Huerfano River
Apishapa
Cucharas
0
25
50
75
100 MILES

Figure 3.--Location of observation wells in Colorado.

COOPERATION

The U.S. Geological Survey and organizations of the State of Colorado have had cooperative agreements for the systematic collection of surface-water records since 1895 and for water-quality records since 1941. Organizations that assisted in collecting data for this report through cooperative agreement with the Survey are:

Arkansas River Compact Administration, L. Idler, Secretary.
Cherokee Water and Sanitation District, F. S. Loosley.
City and County of Denver, Board of Water Commissioners, J. A. Yelenick, President.
City of Aspen, Harold L. Schilling, City Manager.
City of Aurora, C. A. Wemlinger, Director of Utilities.
City of Colorado Springs, Department of Public Utilities, James D. Phillips, Director.
City of Englewood, Dr. W. F. Owen, Director, Wastewater Treatment Plant.
City of Fruita, Robert Pollock, Mayor.
City of Glendale, Robert Taylor.
City of Glenwood Springs, Michael Capp.
City of Longmont, Linn Folsom.
City of Thornton, Joseph Vigil.
City of Steamboat Springs, Daniel J. Hartman, Director of Public Works.
Colorado Division of Water Resources, J. A. Danielson, State Engineer.
Colorado Geological Survey, Walter R. Junge, Senior Engineering Geologist.
Colorado River Water Conservation District, Roland C. Fischer, Secretary-Engineer.
Delta County Board of County Commisioners, Roger Blouch, Chairman.
Denver Regional Council of Governments, Robert D. Farley, Executive Director.
Eagle County Board of Commissioners, D. E. Mott, Commissioner.
Evergreen Metropolitan District, G. C. Schulte, General Manager.
Garfield County, Rodger Ludwig, Director of Administrative Services.
Grand County, R. Howard Moody, County Manager.
Larimer-Weld Regional Council of Governments, L. L. Pearson, Executive Director.
Lost Creek Groundwater Management District, G. H. Bush.
Metropolitan Denver Sewage Disposal District No. 1, Jack B. Enger, Manager.
Mineral County, Charles Steele.
Moffat County, Richard Gibbons.
North Kiowa-Bijou Ground Water Management District, Donald F. McClary.
Northern Colorado Water Conservancy District, L. Simpson.
Pitkin County Board of County Commissioners, C. Stewart, County Manager.
Pueblo Civil Defense, Betty Jo Hopper, Director.
Purgatoire River Water Conservancy District, C. Latuda, President.
Rio Blanco County Board of County Commissioners, A. J. Jones.
Rio Grande Water Conservation District, Ralph Curtis, Manager.
Southeastern Colorado Water Conservancy District, C. L. Thomson, General Manager.
Southwestern Water Conservation District, Edward Searle, Manager.
Town of Breckenridge, Gary Martinez, Town Manager.
Town of Castle Rock, Tom Gallier, Director of Utilities.
Trinchera Water Conservancy District, Lyle Smith, President.
Uncompahgre Valley Water Users Association, James Herbit, Manager.
Upper Yampa Water Conservancy District, J. Fetcher.
Upper Arkansas River Water Conservancy District, K. Baker, General Manager.
Urban Drainage and Flood Control District, L. Scott Tucker, Executive Director.
Yellow Jacket Water Conservancy District, F. G. Cooley, Secretary-Council.

COOPERATION

Financial assistance was also provided by the U.S. Army, Corps of Engineers, U.S. Army; U.S. Air Force; Bureau of Indian Affairs, Bureau of Land Management, Bureau of Mines, Bureau of Reclamation, the National Park Service, and the U.S. Environmental Protection Agency. Organizations that supplied data are acknowledged in station descriptions.

HYDROLOGIC CONDITIONS

PRECIPITATION

Precipitation during the 1985 water year was, in general, greater than normal throughout the Colorado River basin in Colorado. This greater than normal precipitation represents a continuation of the pattern from the preceding water year.

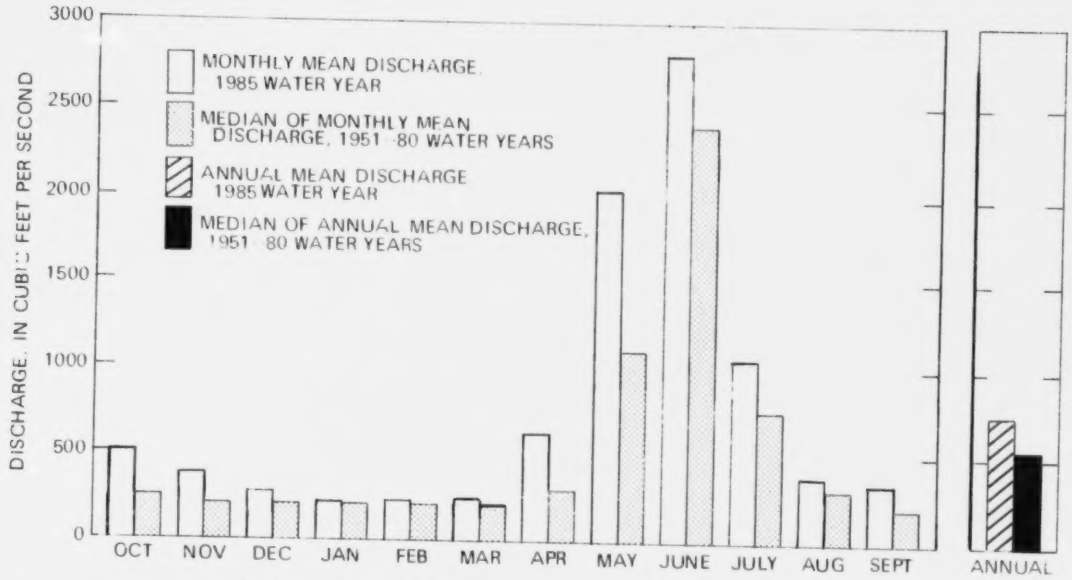
Precipitation data from published reports of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, for the Colorado River basin in Colorado is shown in table 1.

Table 1.--Precipitation during the 1985 water year and departures from normal precipitation, in inches

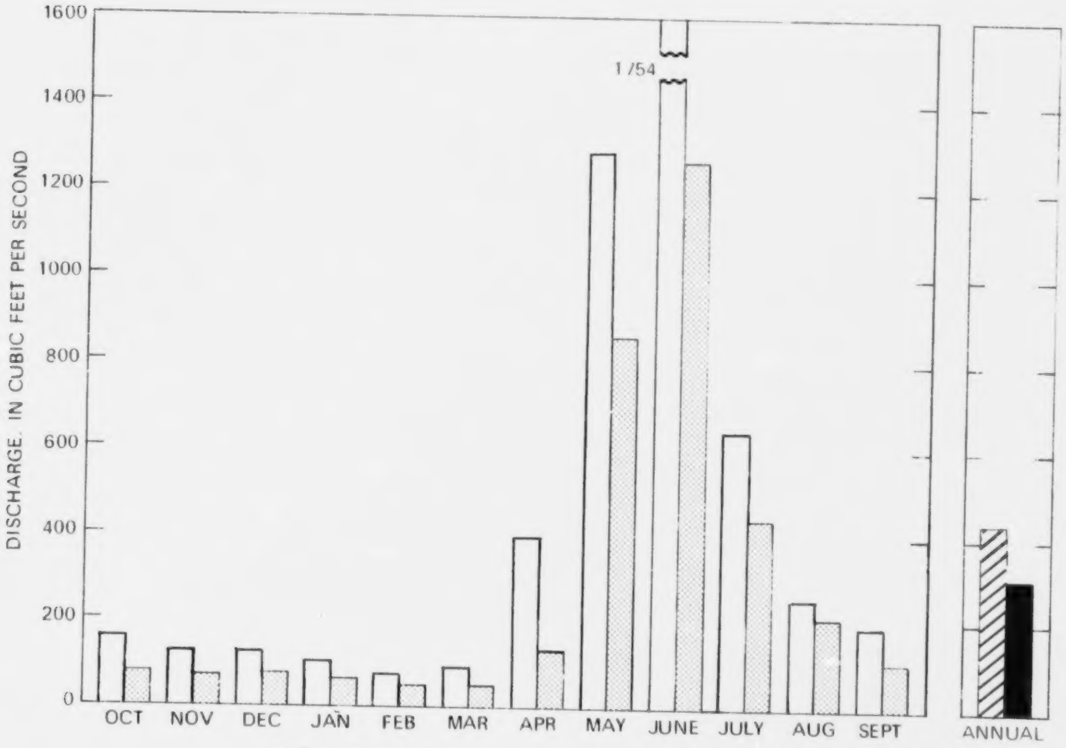
Drainage basin	October--March		April--September		Water year	
	Precipitation	Departure-	Precipitation	Departure	Precipitation	Departure
Colorado River-----	9.71	+2.10	9.95	+2.20	19.66	+4.30

STREAMFLOW

Streamflow in the Colorado River basin was, in general, greater than normal throughout the entire water year. Monthly and annual mean discharges for the 1985 water year are compared with the median monthly and annual mean discharges for the 1951-1980 water years for selected stations in figure 4. The monthly mean discharge for the 1985 water year at station 09070000, Eagle River below Gypsum (fig. 4A), ranged from 113 percent of normal during August to 209 percent of normal during April. The 1985 annual mean discharge was 137 percent of normal compared to 196 percent of normal during the 1984 water year. At station 09112500, East River at Almont (fig. 4B), the monthly mean discharge for the 1985 water year ranged from 131 percent of normal during February to 291 percent of normal during April. The 1985 annual mean discharge was 138 percent of normal as compared to 170 percent of normal during the 1984 water year. Year-end storage in Taylor Park Reservoir decreased from 97,100 acre-feet during the 1984 water year to 79,700 acre-feet during the 1985 water year.



A Eagle River below Gypsum. Drainage area 944 square miles



B. East River at Almont. Drainage area 289 square miles

Figure 4.--Discharge for 1985 water year compared with median discharge for 1951-80 water years at two representative streamflow-gaging stations.

Chemical Quality of Streamflow

Water-quality conditions for the 1985 water year were not characterized by any unusual conditions or constituent concentrations. Water quality in the Gunnison and Colorado River basins did not have any significant change from previous years.

In general, higher flows during 1985 resulted in smaller concentrations of chemical constituents, and thus smaller concentrations of dissolved solids than have been determined during the previous 10 years (tables 2 and 3). The average specific conductance values for the 1985 water year were less than the average specific conductance values for the previous 10 years. However, the increased flows during the spring runoff generally resulted in larger concentrations of suspended sediment in the basin than during most previous years.

Table 2.--1985 Water year average values for selected constituents

(CFS, cubic foot per second; US/CM, micromhos per centimeter; MG/L, milligrams per liter)

STATION NUMBER NAME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS, TOTAL (MG/L AS P)	HARD-NESS (MG/L AS CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)
09034500 Colorado River at Hot Sulphur Spgs.	259	133	0.8	0.06	59	99	---
09067000 Beaver Creek at Avon	18	271	---	----	130	---	---
09069000 Eagle River at Gypsum	647	713	.88	.19	280	448	---
09071100 Colorado River near Glenwood Spgs.	3600	444	---	----	140	239	---
09095500 Colorado River near Cameo	6200	755	---	----	210	433	726
09152500 Gunnison River near Grand Junction	4310	630	---	.18	260	433	364
09163500 Colorado River near Colorado-Utah State Line	9130	891	---	.28	310	573	764

Table 3.--10 Year average (October 1, 1974 to September 30, 1984) values for selected constituents

STATION NUMBER NAME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS, TOTAL (MG/L AS P)	HARD-NESS (MG/L AS CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)
09034500 Colorado River at Hot Sulphur Spgs.	317	130	0.93	0.05	54	83	---
09067000 Beaver Creek at Avon	16	229	---	----	110	145	---
09069000 Eagle River at Gypsum	668	745	1.05	.11	280	461	---
09071100 Colorado River near Glenwood Spgs.	2620	565	.84	.05	160	350	---
09095500 Colorado River near Cameo	6300	861	1.35	.08	220	562	482
09152500 Gunnison River near Grand Junction	2420	958	1.94	.14	410	696	267
09163500 Colorado River near Colorado-Utah State Line	9130	955	2.34	.25	320	616	862

Ground Water

Water levels indicate the response of an aquifer to recharge and discharge. Recharge and discharge can be either natural or manmade. Water levels will rise when recharge is plentiful and discharge is small and will decline when recharge is small and discharge is large.

The aquifers within the Colorado River Basin can be grouped into two categories: unconsolidated aquifers and consolidated aquifers. The unconsolidated aquifers receive recharge from precipitation, return flow from applied irrigation water and leakage from canals and streams. Discharge of ground water may be by seepage to streams, seeps, or springs, by loss to evapotranspiration, or by withdrawal by pumping wells. The consolidated aquifers receive recharge from precipitation and streams crossing outcrop areas. These aquifers primarily discharge water to springs and streams, although locally some discharge is by wells.

West of the Continental Divide, where withdrawals are small, water-level fluctuations reflect changes mostly in natural conditions.

Most of the aquifers in the Colorado River basin are still under natural conditions except where ground water is being pumped for the production and development of oil, gas, and coal.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal-growth potential (AGP) refers to the results of an algal assay test which determines the nutrients that are limiting to growth, as well as to quantify the biological response to changes in concentrations of algal growth-limiting nutrients. These measurements are made by inoculating a water sample with an algal test organism and evaluating its growth response to various additions of nutrients overtime. The water samples are spiked with .005 mg/L phosphorus and .075 mg/L nitrogen, and the algal growth potential results are reported in milligrams per liter.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Bacteria are microscopic unicellular organisms, typically spherical, rod like, of spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2C° on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which the bottom of a streambed, lake, pond, reservoir, or estuary is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter (mg/L), necesssary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area of volume of habitat.

Ash mass is the mass of amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and those for periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile, or 0.3468 millimeter from 1 square kilometer.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (cfs, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second, or 448.8 gallons per minute, or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 um membrane filter. This may include some very small (colloidal) suspended particles as well as the amount of substance present in true chemical solution. It is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved oxygen (DO) is the dissolved-oxygen content of water in equilibrium with air and is a function of atmospheric pressure and temperature and dissolved-solids concentration of the water. The capacity of water for dissolved-oxygen decreases as dissolved solids or temperature increase or as atmospheric pressure decreases. Dissolved-solids concentration has the least effect on dissolved-oxygen concentration. Photosynthesis and respiration may cause diel variations in dissolved-oxygen concentration in water from some streams.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is the physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium anbd magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Micrograms per liter (UG/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulaltion tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Table 4.-- Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as N	.07139	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})*	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-2})	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate as N	.07139
Chronium (Cr^{+6})*	.11539	Nitrite as N	.07139
Cobalt (Co^{+2})*	.03394	Phosphate,ortho as P	.09686
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2}*	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (ZN^{+2})*	.03060

*Constituents reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 5.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*

(All values calculated to three significant figures)

Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	639-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	313-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

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*Based on water density of 1.000 g/mL and a specific gravity of sediment of 2.65.

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.............	0.00024 - 0.004	Sedimentation
Silt.............	.004 - .062	Sedimentation
Sand.............	.062 - 2.0	Sedimentation or sieve
Gravel...........	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Periphyton is the assemblage of microorganisms attached to, and growing upon, solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticide network is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per mL of sample.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 disintegrations per minute (dpm).

Polychlorinated biphenyls (PCB's) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Radiochemical network is a network of regularly sampled water-quality stations where samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose and Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in ug/L (micrograms per liter), radium as radium-226 in PC/L (pCi/L, picocuries per liter), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per liter (ug/L). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay-sized) sediments in the samples are also determined.

Recoverable from bottom material the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft (0.09 m) above the bed) expressed as milligrams of dry sediments per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge in cfs times concentration in mg/L times 0.0027.

Suspended-sediment load is that quantity of suspended sediment passing a section in a specified period.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks and is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the number and specific chemical types of ions in solution and can be used for approximating the dissolved-solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may vary in the same source with changes in the composition of the water. A microsiemen is equal to one millionth of a mho.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the work "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended, recoverable the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total in bottom material the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total, recoverable the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in the U.S. Geological Survey is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1981, is called the "1981 water year."

Weighted average is used in this report to indicate the discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to State annual basic-data reports published prior to 1976.

WDR is used as an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to State annual basic-data reports published after 1976.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and each partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station.

Gaps are left in the sequential allocation of numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 07083000, which appears just to the left of the station name, includes the 2-digit part number "07" plus the 6-digit downstream order number "083000." In this report the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are for Part 6 (Missouri River basin), Part 7 (Lower Mississippi River basin), and Part 8 (Western Gulf of Mexico basins). Records for Part 9 (Colorado River Basin) are in Volumes 2 and 3. All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are: (1) To depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis, and (2) to detect and assess long-term changes in streamflow and stream quality.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 5-, 15-, 30- or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the U.S. Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly or annual figures of discharge are affected by the revisions, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The type of gage currently in use, the datum of the present gage above mean sea level, referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records, to conditions which affect the natural flow of the gaging station, availability of water-quality records, and reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance.

The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents), and the minimum gage height, if it is significant, are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second (ft^3/s) during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in acre-feet (line headed "AC-FT"). In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and at miscellaneous sites follow the information for continuous record sites. Data for partial-record discharge stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" means within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second (ft^3/s) for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. However, because all the effects cannot be measured or evaluated, satisfactory adjustments generally cannot be made. For some stations, available figures of diversions or change in contents of reservoirs are included as supplemental data. Even at those stations where adjustments can be made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of Discharge Collected by Agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected at many sites in Colorado during the water year by the folowing agencies: City of Colorado Springs; Colorado Division of Water Resources; Forest Service, U.S. Department of Agriculture; City and County of Denver, Board of Water Commissioners; National Weather Service, Department of Commerce; and the Bureau of Reclamation.

Access to WATSTORE DATA

The National WAter Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, VA 22092

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Water samples for analyses usually are collected at or near streamflow-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data, the period of daily record for parameters that are measured on a daily basis (such as, specific conductance, pH, dissolved oxygen, water temperature, sediment discharge), extremes for the period of daily record, extremes for current year, and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most methods for collecting and analyzing water samples are described in "U.S. Geological Survey Techniques of Water-Resources Investigations," which are listed on page 39.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling, as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field determination of carbonate and bicarbonate in the laboratory.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 grams per milliliter (g/mL), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/mL, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

REVISIONS--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for surface-water stations. For stations where water temperatures are taken manually the water temperatures are taken about the same time each day. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published.

Table 6.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C equals 5/9(°F-32°) or °F equals 9/5(°C)+32°.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. See "Definition of Terms," and table 5 for converting English units to SI units.

The biological information includes qualitative and quantitative analyses of plankton, periphyton, Chlorophyll a and b, biomass and bottom organisms. Microbiological information includes quantitative identification of selected bacteriological indicator organisms.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). Analysis of pesticides and organic substances in water are described by Goerlitz and Lamar (1967), Lamar, Goerlitz, and Law (1965), and Goerlitz and Brown (1972). The collection and analysis of aquatic, biological, and microbiological samples are described by Slack and others (1973).

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. A blank in the daily mean concentration column of the suspended-sediment discharge table indicates the value in the sediment discharge column was estimated. A zero value in the sediment-discharge column when there are nonzero values in the mean discharge and mean concentration columns indicates the load is less than 0.005 ton per day.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the streams.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

The annual series of Water-Supply Papers that give information on quality of surface waters in Colorado are shown in the following table:

Table 7.--Water-Supply Paper numbers and parts, water years 1941-71

Year	Part 6	Part 7	Part 8	Part 9	Irrigation (1951-65)[1]
1941	942	942	942	942	----
1942	950	950	950	950	----
1943	970	970	970	970	----
1944	1022	1022	1022	1022	----
1945	1030	1030	1030	1030	----
1946	1050	1050	1050	1050	----
1947	1102	1102	1102	1102	----
1948	1132	1133	1133	1133	----
1949	1162	1163	1163	1163	----
1950	1187	1188	1188	1189	----
1951	1198	1199	1199	1200	1264
1952	1251	1252	1252	1253	1362
1953	1291	1292	1292	1293	1380
1954	1351	1352	1352	1353	1430
1955	1401	1402	1402	1403	1465
1956	1451	1452	1452	1453	1485
1957	1521	1522	1522	1523	1524
1958	1572	1573	1573	1574	1575
1959	1643	1644	1644	1645	1699
1960	1743	1744	1744	1745	1746
1961	1883	1884	1884	1885	1886
1962	1943	1944	1944	1945	1946
1963	1949	1950	1950	1951	1952
1964	1956	1957	1957	1958	1960
1965	1963	1964	1964	1965	1967
1966	1993	1994	1994	1995	----
1967	2013	2014	2014	2015	----
1968	2095	2096	2097	2098	----
1969	2145	2146	2147	2148	----
1970	2155	2156	2157	2158	----
1971	2165	[2]2166	[2]2167	[2]2168	----

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[1] Annual series, "Quality of Surface Waters for Irrigation, Western States."

[2] In preparation.

Information about reports and other data on quality of water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Collection of Data

Only ground-water level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a record of water-level changes in important aquifers.

The locations of wells are referenced by two systems. One system is based on latitude and longitude, and the second is based on the U.S. Bureau of Land Management system of land subdivision. The latitude and longitude grid system facilitates machine processing of data and plotting of data points.

The latitude and longitude grid system is used to provide the geographic location of each well. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; N designates north; the next seven digits denote degrees, minutes, and seconds of longitude; and the last two digits are sequential numbers for wells within a 1-second grid, as shown below in figure 6.

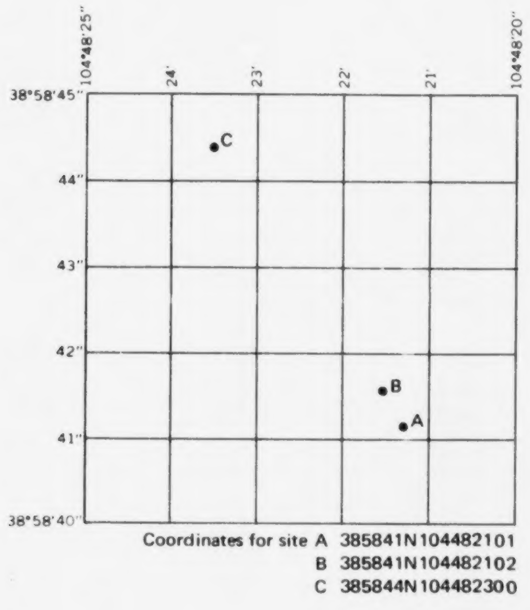

Figure 6.--System for numbering wells and miscellaneous sites (latitude and longitude).

The local well number locates a well within a 10-acre tract using the U.S. Bureau of Land Management system of land subdivision. The components of the local well number proceed from the largest to the smallest land subdivisions. This is in contrast to the legal description, which proceeds from the smallest to the largest land subdivision. The largest subdivision is the survey. Colorado is governed by three surveys: The Sixth Principal Meridian Survey (S), the New Mexico Survey (N), and the Ute Survey (U). Costilla County was not included in any of the above official surveys. This report follows the convention of the Costilla County Assessor in which the northern part of the county is governed by the Sixth Principal Meridian Survey and the southern part of the county is governed by a local system called the Costilla Survey (C). The first letter of the well location designates the survey.

A survey is subdivided into four quadrants formed by the intersection of the baseline and the principal meridian. The second letter of the well location designates the quadrant: A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. A quadrant is subdivided in the north-south direction every 6 mi by townships and is subdivided in the east-west direction every 6 mi by ranges. The first number of the well location designates the township and the second number designates the range.

The 36-mi^2 area described by the township and range designation is subdivided into 1-mi^2 areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres, is subdivided into quarter sections. The 160-acre area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-acre area is designated in the same manner by the second letter following the section. The quarter-quarter section is subdivided into quarter-quarter-quarter sections. The 10-acre area is designated in the same manner by the third letter following the section. If more than one well is located within the 10-acre tract, the wells are numbered sequentially in the order in which they were originally inventoried. If this number is necessary, it will follow the three-letter designation.

The local number is provided for continuity with older reports.

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The height of the meaasuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Publications

Publication of ground-water level data for the United States in water-supply papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single water-supply paper covering the entire nation was issued each year (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate water-supply papers were issued for six sections of the United States. Water-level data for Colorado are included in the water-supply papers listed below, each report containing one or more calendar years (January through December) of data. Data in this report are for the 12-month water year ending September 30.

Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.
1940	910	1945	1027	1950	1169	1955	1408
1941	940	1946	1075	1951	1195	1956-60	1760
1942	948	1947	1100	1952	1225	1961-65	1845
1943	990	1948	1130	1953	1269	1966-70	1980
1944	1020	1949	1160	1954	1325		

Information about reports and other data on ground water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

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PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

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COLORADO RIVER MAIN STEM

09010500 COLORADO RIVER BELOW BAKER GULCH, NEAR GRAND LAKE, CO

LOCATION.--Lat 40°19'33", long 105°51'22", in NE¼NW¼ sec.12, T.4 N., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 500 ft downstream from Baker Gulch, 1.0 mi upstream from Bowen Gulch, and 5.5 mi northwest of town of Grand Lake.

DRAINAGE AREA.--53.4 mi².

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,750 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 21 to Mar. 31, Aug. 24 to Sept. 12. Records good except for estimated daily discharges, which are poor. Transmountain diversion above station by Grand River ditch (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--32 years, 64.2 ft³/s; 46,510 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 976 ft³/s, June 30, 1957, gage height, 7.19 ft; maximum gage height, 7.30 ft, June 25, 1971; minimum daily discharge, 3.0 ft³/s, Jan. 13, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 703 ft³/s at 0100 June 9, gage height, 6.83 ft; minimum daily, 10.0 ft³/s, Feb. 1-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	37	19	15	10	11	13	128	242	107	40	14
2	48	40	19	15	10	11	15	162	227	103	47	18
3	53	37	19	15	10	11	20	205	245	99	41	15
4	53	36	19	15	10	11	22	261	261	98	36	16
5	69	47	19	15	10	11	21	295	289	96	33	16
6	69	36	18	14	10	11	18	247	340	93	32	13
7	62	38	18	14	10	11	19	207	492	88	29	13
8	60	31	18	14	10	11	22	225	613	83	26	17
9	59	29	18	14	10	11	18	260	643	77	26	14
10	60	33	18	14	10	11	20	272	558	73	24	14
11	57	29	17	13	10	11	26	281	442	70	23	14
12	57	36	17	13	10	11	28	219	387	70	37	21
13	65	32	17	13	10	11	51	184	382	69	26	17
14	65	27	17	13	10	11	58	161	402	61	23	17
15	54	29	17	13	10	11	74	150	403	62	20	17
16	52	31	17	12	11	11	98	143	407	59	18	17
17	61	27	17	12	11	11	106	152	409	55	17	16
18	54	22	17	12	11	11	102	162	353	65	19	16
19	58	22	17	12	11	11	94	171	312	102	19	17
20	54	22	17	12	11	11	74	165	289	84	18	16
21	51	21	17	12	11	11	58	165	283	77	16	16
22	48	21	17	12	11	11	49	170	255	63	17	19
23	52	21	17	12	11	11	43	179	227	83	16	20
24	47	21	17	12	11	11	41	206	202	81	15	19
25	47	21	17	12	11	11	35	227	211	68	16	20
26	50	20	16	11	11	11	34	237	192	60	16	21
27	42	20	16	11	11	11	34	250	153	55	17	25
28	54	20	16	11	11	11	57	297	130	49	20	31
29	42	20	16	11	---	11	77	344	120	49	19	28
30	39	20	16	11	---	11	99	334	110	49	17	21
31	39	---	16	11	---	11	---	282	---	44	14	---
TOTAL	1668	846	536	396	293	341	1426	6741	9579	2292	737	538
MEAN	53.8	28.2	17.3	12.8	10.5	11.0	47.5	217	319	73.9	23.8	17.9
MAX	69	47	19	15	11	11	106	344	643	107	47	31
MIN	39	20	16	11	10	11	13	128	110	44	14	13
AC-FT	3310	1680	1060	785	581	676	2830	13370	19000	4550	1460	1070

CAL YR 1984 TOTAL 39979.6 MEAN 109 MAX 740 MIN 5.6 AC-FT 79300
WTR YR 1985 TOTAL 25393 MEAN 69.6 MAX 643 MIN 10 AC-FT 50370

NOTE.--NO GAGE-HEIGHT RECORD NOV. 21 TO MAR. 30.

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09011000 COLORADO RIVER NEAR GRAND LAKE, CO

LOCATION.--Lat 40°13'08", long 105°51'25", in NE¼SW¼ sec.13, T.3 N., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 200 ft downstream from bridge on U.S. Highway 34,400 ft upstream from high-water line of Shadow Mountain Lake at elevation 8,367 ft, and 3.0 mi southwest of town of Grand Lake.

DRAINAGE AREA.--102 mi^2.

PERIOD OF RECORD.--Streamflow records, July 1904 to September 1918, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as Grand River (North Fork) near Grand Lake 1904 and as North Fork of Grand River near Grand Lake 1905-18. Water-quality data available 1970 to 1978.

REVISED RECORDS.--WSP 1213: 1914. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,380 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 15, 1934, nonrecording gage at present site and datum. June 15, 1934, to Sept. 26, 1944, water-stage recorder at site 1,100 ft downstream, at different datum.

REMARKS.--Estimated daily discharges: Nov. 27, 29, Dec. 1-8, 10, 14, 17-18, 23, 25, 30, Jan. 1-4, 12-15, 24-26, Jan. 30 to Feb. 24, Feb. 26 to Mar. 5, Mar. 8, 14-15, 17, 21-31. Records good except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 200 acres of hay meadows above station and about 2,000 acres below. Transmountain diversion above station by Grand River ditch through La Poudre Pass to Cache la Poudre River basin (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--66 years (water years 1905-18, 1934-85), 90.0 ft^3/s; 65,230 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,840 ft^3/s, June 15, 16, 1918, gage height, 7.0 ft, from rating curve extended above 1,100 ft^3/s; maximum gage height, 8.21 ft, Apr. 20, 1971 (backwater from ice); minimum daily discharge, 1.7 ft^3/s, July 18, 19, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 615 ft^3/s at 1200 June 9, gage height, 5.94 ft; minimum daily, 6.7 ft^3/s, July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	51	32	24	21	21	23	207	237	23	55	23
2	66	47	32	24	21	21	24	236	203	23	59	27
3	70	52	32	24	21	21	26	271	217	17	56	28
4	74	44	32	24	21	21	26	331	219	15	49	29
5	78	50	30	24	21	21	28	385	244	15	45	30
6	86	49	30	23	21	22	32	358	271	13	44	27
7	73	44	30	22	21	21	30	303	385	9.0	42	25
8	68	45	29	22	21	21	34	308	505	8.6	40	30
9	69	44	28	22	21	20	38	351	587	8.0	38	30
10	69	46	27	22	21	20	48	350	528	7.7	38	27
11	69	45	27	23	21	20	54	385	421	7.4	36	27
12	66	47	26	23	21	20	56	319	340	7.4	47	33
13	79	48	26	23	21	20	74	264	322	7.7	43	30
14	84	44	26	22	21	20	94	221	337	7.1	37	28
15	70	38	26	22	21	20	123	205	336	7.2	34	27
16	62	48	26	22	21	20	147	193	331	7.5	33	28
17	61	44	27	22	21	20	164	204	343	6.7	31	26
18	63	47	27	22	21	23	182	222	297	7.1	31	25
19	59	48	26	22	21	22	181	238	250	20	34	28
20	63	46	28	22	21	22	128	233	226	52	31	27
21	60	46	25	22	21	22	108	228	213	39	29	26
22	59	39	25	20	21	22	93	230	182	22	29	29
23	57	48	25	22	21	22	87	232	153	31	27	34
24	56	35	25	22	21	22	90	242	130	41	25	30
25	53	37	24	22	21	23	83	274	138	31	24	31
26	52	37	24	22	21	23	79	283	123	29	23	31
27	54	34	23	22	21	23	75	283	88	25	23	35
28	51	31	23	22	21	23	103	305	59	21	24	41
29	55	32	24	22	---	23	148	327	40	32	32	43
30	52	32	24	22	---	23	176	337	30	60	27	34
31	52	---	24	22	---	23	---	289	---	56	24	---
TOTAL	1992	1298	833	694	588	665	2554	8614	7755	656.4	1110	889
MEAN	64.3	43.3	26.9	22.4	21.0	21.5	85.1	278	259	21.2	35.8	29.6
MAX	86	52	32	24	21	23	182	385	587	60	59	43
MIN	51	31	23	20	21	20	23	193	30	6.7	23	23
AC-FT	3950	2570	1650	1380	1170	1320	5070	17090	15380	1300	2200	1760

CAL YR 1984 TOTAL 50418 MEAN 138 MAX 1200 MIN 14 AC-FT 100000
WTR YR 1985 TOTAL 27648.4 MEAN 75.7 MAX 587 MIN 6.7 AC-FT 54840

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO

LOCATION.--Lat 40°19'40", long 105°34'39", in SW¼NW¼ sec.9, T.4 N., R.73W., Larimer County, Hydrologic Unit 10190006, on right bank at upstream end of Aspen Creek siphon, 700 ft downstream from east portal, and 4.5 mi southwest of Estes Park.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to current year (monthly discharge only for August and September 1947).

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 8,250 ft, from topographic map. Prior to Oct. 1, 1950, water-stage recorder and Parshall flume at different datum. Oct. 1, 1950, to Sept. 30, 1952, water-stage recorder and Cippoletti weir at different datum.

REMARKS.--No estimated daily discharges. Records excellent. This is a transmountain diversion from Grand Lake and Shadow Mountain Lake for power and irrigation developments in the South Platte River basin as part of the Colorado-Big Thompson project. Diversion point is at west portal near town of Grand Lake, 13.35 mi west of east portal.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--39 years, 276 ft³/s; 200,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 592 ft³/s June 30, 1962; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	235	250	407	250	445	357	553	548	555	508	443
2	249	251	253	401	250	443	447	553	548	555	506	461
3	252	255	256	256	250	443	445	553	551	555	506	451
4	247	252	252	247	248	445	441	557	553	557	504	408
5	253	266	259	253	249	443	415	551	553	557	506	333
6	256	253	255	255	251	449	445	546	551	553	525	406
7	253	251	256	254	343	443	447	553	535	557	531	402
8	253	256	253	249	338	451	455	555	200	555	542	404
9	252	251	245	253	345	445	502	555	424	555	540	413
10	149	251	256	252	344	447	500	551	553	557	415	422
11	259	250	127	252	343	449	498	553	548	555	410	387
12	262	248	15	256	343	449	516	546	551	557	412	389
13	253	254	9.0	257	353	445	553	544	557	557	410	387
14	254	255	131	258	350	278	548	542	548	553	410	386
15	254	247	247	259	272	443	531	536	553	557	408	286
16	253	252	247	268	439	445	502	553	553	555	412	429
17	265	251	262	260	453	445	506	544	553	557	410	391
18	253	251	404	253	453	385	500	553	548	559	408	396
19	258	252	405	256	457	445	347	546	553	531	413	391
20	255	251	366	251	445	449	471	544	557	461	326	392
21	257	251	368	248	443	449	502	551	559	465	421	156
22	252	252	357	247	441	449	498	548	557	467	406	150
23	252	251	406	252	445	449	498	548	553	467	408	252
24	256	253	408	250	447	445	544	555	551	398	402	274
25	257	251	407	244	443	455	548	555	555	378	402	258
26	251	251	408	259	445	457	555	551	559	487	404	200
27	253	252	406	253	449	459	551	553	548	465	408	275
28	251	257	405	251	439	305	551	555	555	465	408	153
29	256	249	406	246	---	303	551	553	561	465	413	145
30	254	249	403	251	---	445	551	553	555	504	406	252
31	253	---	402	252	---	445	---	548	---	508	406	---
TOTAL	7597	7548	9124.0	8150	10328	13348	14775	17058	16090	16067	13586	10092
MEAN	245	252	294	263	369	431	493	550	536	518	438	336
MAX	265	266	408	407	457	459	555	557	561	559	542	461
MIN	75	235	9.0	244	248	278	347	536	200	378	326	145
AC-FT	15070	14970	18100	16170	20490	26480	29310	33830	31910	31870	26950	20020

CAL YR 1984 TOTAL 96721.00 MEAN 264 MAX 552 MIN .00 AC-FT 191800
WTR YR 1985 TOTAL 143763.0 MEAN 394 MAX 561 MIN 9.0 AC-FT 285200

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1970 to current year.

REMARKS.--Field data collected prior to 1974 water year are available in district office.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
18...	11:00	457	33	6.9	7.5	8.3	13	3.9	0.7	1.5
NOV										
28...	16:00	404	37	6.7	3.5	8.8	16	4.8	0.9	1.6
DEC										
27...	17:00	500	42	--	3.5	9.0	18	5.5	1.0	1.7
JAN										
23...	16:00	398	50	6.9	2.0	11.2	20	6.1	1.2	1.8
FEB										
20...	16:00	453	50	7.4	2.5	8.4	20	6.0	1.2	2.0
APR										
01...	15:30	406	47	6.9	3.5	9.2	20	6.0	1.1	1.8
16...	17:00	500	46	7.5	4.5	8.3	19	5.6	1.1	1.8
MAY										
13...	17:30	544	41	7.1	6.0	9.4	17	5.2	1.0	1.6
JUN										
18...	16:30	548	29	8.5	12.0	9.0	10	3.1	0.6	1.2
JUL										
22...	15:30	467	30	7.3	14.0	8.0	11	3.4	0.64	1.2
AUG										
14...	17:30	408	39	7.5	16.5	7.3	16	5.0	0.9	1.5
SEP										
24...	11:45	500	45	7.2	10.0	8.0	18	5.2	1.2	1.9

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
18...	0.2	0.5	12	4.2	0.5	0.1	3.7	22	28	<0.10
NOV										
28...	0.2	0.5	--	--	--	<0.1	4.4	--	--	<0.10
DEC										
27...	0.2	0.8	15	5.2	0.5	0.1	4.3	28	38	<0.10
JAN										
23...	0.2	0.7	18	5.4	0.5	0.1	4.5	31	33	<0.10
FEB										
20...	0.2	0.7	19	4.9	0.6	0.1	4.5	31	39	0.10
APR										
01...	0.2	0.8	18	6.0	0.6	0.1	4.3	32	35	0.10
16...	0.2	0.8	17	4.9	0.6	0.1	4.5	30	40	<0.10
MAY										
13...	0.2	0.8	15	5.8	0.5	0.2	4.5	29	42	<0.10
JUN										
18...	0.2	0.9	8.0	4.6	0.3	<0.1	3.7	19	29	<0.10
JUL										
22...	0.2	0.4	9.0	3.0	0.4	0.1	3.1	18	22	<0.10
AUG										
14...	0.2	1.0	14	4.0	0.2	0.1	3.1	24	27	--
SEP										
24...	0.2	1.2	16	5.9	0.5	0.1	3.8	29	40	<0.10

09013000 ALVA B ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
18...	<0.10	0.2	--	--	--	60	--	<1	--	--
NOV										
28...	--	0.4	--	<1	7	57	3	4	4	15
DEC										
27...	<0.10	0.2	--	--	--	69	--	2	--	--
JAN										
23...	<0.10	0.3	--	--	--	52	--	3	--	--
FEB										
20...	0.10	0.3	0.4	<1	9	46	<1	4	12	21
APR										
01...	0.10	0.3	0.4	--	--	40	--	2	--	--
16...	<0.10	0.4	--	--	--	32	--	10	--	--
MAY										
13...	<0.10	0.8	--	<1	7	75	6	10	<1	8
JUN										
18...	<0.10	0.4	--	--	--	66	--	3	--	--
JUL										
22...	<0.10	0.4	--	--	--	39	--	4	--	--
AUG										
14...	<0.10	0.6	--	<1	2	37	<1	3	1	9
SEP										
24...	<0.10	0.3	--	--	--	32	--	2	--	--

09014500 SHADOW MOUNTAIN LAKE NEAR GRAND LAKE, CO

LOCATION.--Lat 40°12'26", long 105°50'27", in SW¼NW¼ sec.19, T.3 N., R.75 W., Grand County, Hydrologic Unit 14010001, in gate house on left side of outlet gates near center of Shadow Mountain Dam on Colorado River, 1.0 mi upstream from Pole Creek and 3.2 mi south of town of Grand Lake.

DRAINAGE AREA.--185 mi^2.

PERIOD OF RECORD.--April 1947 to current year. Prior to October 1960, published as Shadow Mountain Reservoir near Grand Lake.

REVISED RECORDS.--WSP 1149: 1947-48. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929. Supplementary water-stage recorder on Grand Lake, 800 ft north of outlet gates and 2.9 mi north of Shadow Mountain Dam.

REMARKS.--Lake is formed by earth and rockfill dam and dikes. Storage began in April 1947. Capacity, 17,860 acre-ft, including usable capacity of Grand Lake above elevation 8,365 ft, between elevation 8,347 ft, sill of outlet gate, and 8,367 ft, maximum water surface. Dead storage in Shadow Mountain Lake, 506 acre-ft. Dead storage in Grand Lake not determined. Shadow Mountain Lake is used for stabilization of water level in Grand Lake. Usable capacity for diversion through Alva B. Adams tunnel, 3,660 acre-ft between elevations 8,365 ft, crest of tunnel inlet and 8,367 ft, maximum water surface. Figures given represent usable contents as determined from summation of individual contents of Grand Lake and Shadow Mountain Lake. Transmountain diversion from Colorado River basin, including water pumped from Lake Granby, is effected through Grand Lake and Alva B. Adams tunnel, for power and irrigation in South Platte River basin.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 17,920 acre-ft, May 22, 1955, elevation, 8,367.03 ft; minimum since appreciable storage was first attained, 2,630 acre-ft, May 14, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 17,550 acre-ft, Apr. 1, elevation, 8,366.85 ft; minimum, 16,370 acre-ft, May 14, elevation, 8,366.18 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	8,366.56	17,080	-
Oct. 31	8,366.62	17,190	+110
Nov. 30	8,366.63	17,190	-10
Dec. 31	8,366.65	17,190	0
CAL YR 1984			0
Jan. 31	8,366.59	17,130	-60
Feb. 28	8,366.73	17,340	+210
Mar. 31	8,366.64	17,200	-140
Apr. 30	8,366.78	17,410	+210
May 31	8,366.41	16,790	-620
June 30	8,366.59	17,110	+320
July 31	8,366.75	17,350	+240
Aug. 31	8,366.71	17,310	-40
Sept. 30	8,366.80	17,500	+190
WTR YR 1985			+420

09018300 GRANBY PUMP CANAL NEAR GRAND LAKE, CO

LOCATION.--Lat 40°12'25", long 105°50'56", in SW¼NE¼ sec.24, T. 3 N., R.76 W., Grand County, Hydrologic Unit 14010001, at road crossing at south end of Shadow Mountain Lake, 4 mi southwest of Grand Lake, and 13.5 mi northeast of Granby.

PERIOD OF RECORD.--September 1970 to September 1975, March 1978 to current year.

REMARKS.--No flow at time of visit for Jan. Mar, May, June, and July of 1985 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 25...	07:30	726	44	7.1	7.0	6.2	K2	<1
NOV 21...	07:10	800	45	6.5	4.0	8.0	K1	<1
DEC 18...	07:40	762	44	6.5	3.0	8.1	K1	<1
FEB 28...	17:45	790	49	6.8	4.0	7.7	K2	<1
MAR 29...	07:45	330	41	7.0	3.0	7.4	K3	<1
APR 26...	07:00	466	47	7.1	3.5	7.6	K2	<1
AUG 21...	07:00	807	55	6.8	7.0	9.2	K1	K4
SEP 12...	11:00	32	51	6.9	7.0	8.3	K1	<1

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 25...	<0.10	0.3	0.01	<1	4	4	<1	10
NOV 21...	<0.10	0.5	0.03	--	--	--	--	--
DEC 18...	<0.10	<0.2	0.01	--	--	--	--	--
FEB 28...	<0.10	0.3	<0.01	<1	1	<1	3	<10
MAR 29...	<0.10	0.5	<0.01	--	--	--	--	--
APR 26...	<0.10	0.7	0.05	<1	7	11	1	10
AUG 21...	--	0.5	0.01	<1	2	<1	2	20
SEP 12...	--	0.2	0.02	1	4	1	1	20

K BASED ON NON-IDEAL COLONY COUNT.

09018500 LAKE GRANBY NEAR GRANBY, CO

LOCATION.--Lat 40°10'55", long 105°52'14", in NW¼NE¼ sec.35, T.3 N., R.76 W., Grand County, Hydrologic Unit 14010001, in Granby pumping plant at north shore of lake, 2.5 mi north of Granby Dam on Colorado River and 7.5 mi northeast of Granby.

DRAINAGE AREA.--312 mi^2.

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1955, published as Granby Reservoir near Granby.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929. Prior to Apr. 9, 1951, nonrecording gage at dam at present datum.

REMARKS.--Lake is formed by earthfill dam and dikes. Regulation began Sept. 13, 1949, and usuable storage began June 14, 1950, while dam was under construction. Usable capacity, 465,600 acre-ft, between elevations 8,186.00 ft, trash rack sill at outlet, and 8,280.00 ft, top of radial spillway gates. Dead storage, 74,190 acre-ft. Figures given represent usable contents. Lake is used to store water for pumping to Shadow Mountain Lake for transmountain diversion through Alva B. Adams tunnel for, power and irrigation in South Platte River basin.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 465,900 acre-ft, July 13, 1962, elevation, 8,280.05 ft; minimum since appreciable storage was attained, 13,070 acre-ft, Apr. 16, 1978, elevation, 8,190.93 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 459,500 acre-ft, Oct. 15, elevation, 8,279.16 ft; minimum, 363,500 acre-ft, Apr. 17, elevation, 8,265.29 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	8,279.11	459,100	-
Oct. 31	8,278.77	456,700	-2,400
Nov. 30	8,277.30	446,100	-10,600
Dec. 31	8,275.21	431,300	-14,800
CAL YR 1984	-	-	+18,700
Jan. 31	8,273.28	417,800	-13,500
Feb. 28	8,270.52	398,700	-19,100
Mar. 31	8,266.93	374,300	-24,400
Apr. 30	8,265.67	366,000	-8,300
May 31	8,271.66	406,500	+40,500
June 30	8,278.97	458,100	+51,600
July 31	8,277.65	448,600	-9,500
Aug. 31	8,274.28	424,800	-23,800
Sept. 30	8,272.22	410,400	-14,400
WTR YR 1985	-	-	-48,700

09018500 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1973 to June 1975, June 1979, June 1980, July 1981, June 1982, July 1983, June 1984, and July 1985.

REMARKS.--A complete taxonomic identification with cell counts for phytoplankton available in district office.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
JUL						
11...	11:10	0.1	<50	7.3	18.0	8.6
11...	11:11	5.0	<50	7.3	17.0	8.6
11...	11:12	10.0	<50	7.4	16.5	8.6
11...	11:13	20.0	<50	7.5	16.0	8.7
11...	11:14	25.0	50	7.5	14.5	8.0
11...	11:15	30.0	60	7.6	12.0	7.2
11...	11:16	40.0	58	7.6	9.0	6.6
11...	11:17	50.0	55	7.6	7.5	6.4
11...	11:18	60.0	55	7.6	6.5	5.9
11...	11:19	70.0	59	7.5	6.0	5.9
11...	11:20	75.0	55	7.5	6.0	5.8
11...	11:21	80.0	52	7.5	6.0	5.8
11...	11:22	90.0	52	7.4	6.0	5.8
11...	11:23	100	50	7.4	6.0	5.9
11...	11:24	110	50	7.4	5.5	5.8
11...	11:25	120	52	7.4	5.5	5.8
11...	11:26	125	50	7.4	5.5	5.8
11...	11:27	130	50	7.4	5.5	5.8
11...	11:28	140	50	7.4	5.5	5.7
11...	11:29	150	50	7.4	5.5	5.7

DATE	TIME	SAMPLING DEPTH (FEET)	TRANSPARENCY (SECCHI DISK) (IN)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
JUL										
11...	11:00	0.1	105	<50	7.3	18.0	8.6	<1	<1	<0.10
11...	11:50	150	--	50	7.4	5.5	5.7	--	--	<0.10

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)	ALGAL GROWTH POTENTIAL, BOTTLE TEST (MG/L)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
JUL									
11...	0.4	<0.01	1	9	2	<1	40	0.5	12000
11...	0.4	0.01	1	3	4	2	--	--	--

09019500 COLORADO RIVER NEAR GRANBY, CO

LOCATION.--Lat 40°07'15", long 105°54'00", in SW¼NW¼ sec.22, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, on right bank 0.3 mi upstream from bridge on U.S. Highway 34, 1.3 mi upstream from Willow Creek, and 3.2 mi northeast of Granby.

DRAINAGE AREA.--323 mi^2.

PERIOD OF RECORD.--October 1907 to September 1911 (published as Grand River near Granby), October 1933 to September 1953. May 1961 to current year (irrigation season only). Monthly discharge only for some periods,published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,960 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 10, 1908, to Sept. 30, 1911, and May 12 to June 10, 1934, nonrecording gage, at site 300 ft upstream at different datums. June 11, 1934, to Sept. 30, 1953, water-stage recorder at present site and datum.

REMARKS.--No estimated daily discharges: Records good. Flow regulated by Lake Granby (station 09018500) since Sept. 13, 1949. Several diversions for irrigation of hay meadows above station. Transmountain diversions above station by Eureka and Grand River ditches and Alva B. Adams tunnel (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 2,510 ft^3/s, July 11, 1983, gage height, 5.39 ft; minimum daily, 9.6 ft^3/s, Sept. 21, 1981.

EXTREMES FOR PERIOD OF CONTINUOUS RECORD.--Maximum discharge observed, 4,100 ft^3/s, June 20, 1909, gage height, 5.5 ft, site and datum then in use; minimum daily, 6.6 ft^3/s, Jan. 29, 1950; minimum observed prior to starting construction of Shadow Mountain Lake, 20 ft^3/s, Apr. 6, 1936 (discharge measurement).

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 305 ft^3/s at 1300 May 2, gage height, 2.03 ft; minimum daily, 16 ft^3/s, Sept. 5-6, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	48	80	70	45	40
2							---	94	77	70	54	41
3							---	65	77	68	53	29
4							---	75	79	68	62	18
5							---	84	77	65	61	16
6							---	86	77	65	48	16
7							---	84	74	65	51	17
8							---	82	74	64	49	17
9							---	80	119	65	44	17
10							---	82	253	62	41	17
11							---	82	279	65	42	18
12							---	80	279	73	42	17
13							---	80	285	73	40	16
14							---	79	244	74	38	17
15							---	77	195	74	38	17
16							---	76	124	74	38	17
17							---	76	69	74	38	17
18							---	79	65	76	38	18
19							---	82	66	79	38	20
20							---	84	67	77	38	20
21							---	84	67	78	38	20
22							---	82	65	77	38	21
23							---	80	65	80	38	20
24							---	65	65	80	38	20
25							---	74	70	79	38	20
26							---	79	70	77	38	19
27							38	82	70	77	38	20
28							38	80	68	78	38	22
29							38	73	67	82	38	20
30							36	65	68	82	37	19
31							---	71	---	57	40	---
TOTAL							---	2411	3335	2248	1317	606
MEAN							---	77.8	111	72.5	42.5	20.2
MAX							---	94	285	82	62	41
MIN							---	48	65	57	37	16
AC-FT							---	4780	6610	4460	2610	1200

09020700 WILLOW CREEK RESERVOIR NEAR GRANBY, CO

LOCATION.--Lat 40°08'49", long 105°56'31", in SE¼ sec.7, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, in shaft house near right end of Willow Creek Dam, 3.2 mi upstream from mouth, and 4.2 mi north of Granby.

DRAINAGE AREA.--134 mi².

PERIOD OF RECORD.--May 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth and rockfill dam; storage began March 1953. Dead storage pool filled May 3, 1953. Usable capacity, 9,060 acre-ft between elevations 8,077.00 ft, trash rack sill at outlet, and 8,130.00 ft, crest of spillway. Dead storage, 1,490 acre-ft. Figures given represent usable contents. Water is pumped to Lake Granby for transmountain diversion for irrigation and power in South Platte River basin. Records are provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 9,100 acre-ft, May 24, 1984, elevation, 8,130.12 ft; minimum since first filling to spillway, 1,470 acre-ft, Apr. 24, 1974, elevation, 8,090.14 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 8,880 acre-ft, Oct. 8, elevation, 8,129.38 ft; minimum, 4,760 acre-ft, Mar. 4, elevation, 8,112.05 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	8,128.86	8,730	-
Oct. 31	8,129.13	8,810	+80
Nov. 30	8,126.98	8,190	-620
Dec. 31	8,123.45	7,250	-940
CAL YR 1984			+30
Jan. 31	8,118.41	6,040	-1,210
Feb. 28	8,112.86	4,910	-1,130
Mar. 31	8,116.93	5,720	+810
Apr. 30	8,120.54	6,530	+810
May 31	8,126.06	7,930	+1,400
June 30	8,120.52	6,530	-1,400
July 31	8,123.81	7,340	+810
Aug. 31	8,127.43	8,310	+970
Sept. 30	8,117.80	5,910	-2,400
WTR YR 1985			-2,820

09022000 FRASER RIVER AT UPPER STATION, NEAR WINTER PARK

LOCATION.--Lat 39°50'45", long 105°45'05", in Sec.26, T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 0.8 mi upstream from Parsenn Creek and 2.5 mi south of Winter Park.

DRAINAGE AREA.--10.5 mi^2.

PERIOD OF RECORD.--May to September 1908, July to November 1909 (published as "at upper station near Fraser"), October 1968 to September 1973, Aug. 21, 1984 to Sept. 30, 1985. January to September 1911, gage heights only (published as "near Fraser"). Records for August to December 1910, published in WSP 289 as "near Fraser" are unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,520 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1968, nonrecording gage at site 0.9 mi upstream at different datum. Since Oct. 1, 1968, supplementary water-stage recorder and Parshall flume on Berthoud Pass ditch.

REMARKS.--Estimated daily discharges: Oct. 17, 24-26, Oct. 30 to Nov. 2, 4-5, 7-13, Nov. 15 to Jan. 25. Records good, except for estimated daily discharges, which are poor. Transmountain diversions above station through Berthoud Pass ditch to Moffet water tunnel, see elsewhere in this report). Several observations of specific conductance and water temperature were obtained, and are published elsewhere in this report.

AVERAGE DISCHARGE.--6 years, 15.0 ft^3/s; 10,890 acre-ft/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181 ft^3/s, June 5, 1972, gage height 2.15 ft; minimum daily, 1.3 ft^3/s, Feb. 20, 1971.

EXTREMES FOR PERIOD AUGUST 20 TO SEPTEMBER 30.--Maximum discharge, 25 ft^3/s at 1900, Aug 25, gage height, 1.25 ft; minimum daily 9.6 ft^3/s, Sept. 29-30.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 178 ft^3/s at 1800 June 8, gage height, 2.08 ft; maximum gage height 2.69 ft at 0630, Nov. 16, (backwater from ice); minimum daily discharge, 1.4 ft^3/s, Mar. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											---	20
2											---	18
3											---	17
4											---	16
5											---	16
6											---	16
7											---	16
8											---	16
9											---	14
10											---	14
11											---	14
12											---	14
13											---	13
14											---	13
15											---	12
16											---	13
17											---	13
18											---	11
19											---	11
20											17	11
21											19	11
22											18	11
23											17	11
24											19	11
25											21	10
26											21	9.9
27											20	10
28											20	10
29											20	9.6
30											20	9.6
31											20	---
TOTAL											---	391.1
MEAN											---	13.0
MAX											---	20
MIN											---	9.6
AC-FT											---	776

09022000 FRASER RIVER AT UPPER STATION, NEAR WINTER PARK, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	7.6	4.5	3.0	2.8	2.1	1.9	9.6	41	35	22	9.8
2	9.6	7.6	4.5	3.0	2.8	2.1	2.2	14	41	33	20	9.9
3	9.6	7.6	4.5	3.0	2.8	2.1	2.8	18	41	32	18	8.8
4	11	7.5	4.5	3.0	3.0	2.1	2.6	22	42	30	18	11
5	12	7.3	4.5	3.0	3.1	2.1	2.4	23	45	29	17	9.9
6	10	7.1	4.0	3.0	3.1	2.0	2.1	23	52	28	17	8.5
7	9.0	6.9	3.8	3.0	3.0	2.1	2.5	24	65	27	16	8.8
8	8.8	6.6	3.8	3.0	2.8	2.0	3.3	26	77	26	15	8.5
9	13	6.4	3.8	3.0	2.8	2.1	3.4	26	112	26	15	7.7
10	12	6.2	3.8	3.0	2.7	2.0	3.4	28	108	26	15	7.5
11	11	6.0	3.8	2.8	2.6	2.1	3.7	27	100	25	14	8.8
12	11	5.7	3.8	2.8	2.7	1.9	4.3	24	95	25	14	8.5
13	11	5.4	3.7	2.8	2.6	1.6	5.3	22	88	25	14	7.8
14	9.9	5.3	3.4	2.8	2.5	1.9	6.6	20	86	23	13	7.3
15	9.6	5.2	3.3	2.8	2.5	2.0	8.5	19	86	23	12	7.5
16	10	5.1	3.3	2.8	2.5	2.0	9.0	18	85	20	12	7.3
17	9.5	5.0	3.3	2.8	2.5	2.0	9.9	18	77	20	11	6.9
18	9.3	5.0	3.3	2.8	2.6	2.1	12	19	71	20	11	6.6
19	9.0	5.0	3.3	2.8	2.6	2.0	11	18	66	23	11	6.4
20	9.7	5.0	3.3	2.8	2.6	2.0	8.8	18	58	23	10	6.4
21	9.3	4.6	3.0	2.8	2.4	2.2	7.3	19	56	25	9.9	6.4
22	9.0	4.5	3.0	2.8	2.2	2.1	6.6	20	56	23	10	7.3
23	9.3	4.5	3.0	2.8	2.1	2.4	6.6	25	55	23	10	6.9
24	9.1	4.5	3.0	2.8	2.2	2.2	5.8	29	53	22	9.6	6.6
25	9.0	4.5	3.0	2.8	2.2	2.4	5.7	32	52	21	9.3	6.6
26	8.9	4.5	3.0	2.8	2.1	2.2	5.2	34	50	20	9.0	7.5
27	8.9	4.5	3.0	2.7	2.2	1.9	5.8	40	44	20	9.9	7.1
28	7.8	4.5	3.0	2.7	2.1	2.1	6.6	43	42	20	9.9	6.6
29	7.8	4.5	3.0	2.6	---	1.4	6.9	49	39	20	9.0	6.9
30	7.8	4.5	3.0	2.7	---	1.9	7.5	50	36	20	8.8	8.2
31	7.6	---	3.0	2.7	---	2.0	---	43	---	19	8.5	---
TOTAL	299.4	168.6	109.2	88.2	72.1	63.1	169.7	800.6	1919	752	398.9	234.0
MEAN	9.66	5.62	3.52	2.85	2.57	2.04	5.66	25.8	64.0	24.3	12.9	7.80
MAX	13	7.6	4.5	3.0	3.1	2.4	12	50	112	35	22	11
MIN	7.6	4.5	3.0	2.6	2.1	1.4	1.9	9.6	36	19	8.5	6.4
AC-FT	594	334	217	175	143	125	337	1590	3810	1490	791	464

WTR YR 1985 TOTAL 5074.8 MEAN 13.9 MAX 112 MIN 1.4 AC-FT 10070

09024000 FRASER RIVER NEAR WINTER PARK, CO

LOCATION.--Lat 39°54'00", long 105°46'34", in SE¼ sec.4, T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 500 ft downstream from bridge on U.S. Highway 40, 1.1 mi northwest of Winter Park, 2.0 mi upstream from Vasquez Creek, 3.5 mi downstream from point of diversion for Moffat water tunnel, and 3.9 mi southeast of Fraser.

DRAINAGE AREA.--27.6 mi².

PERIOD OF RECORD.--September 1910 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Arrow" 1910-23 and as "near West Portal" 1924-39. Records since June 9, 1936, equivalent to earlier records if transmountain diversions are added to flow past station.

REVISED RECORDS.--WSP 929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,906.23 ft, Colorado State Highway Datum (levels by U.S. Geological Survey). Sept. 23, 1910, to May 12, 1916, nonrecording gage at trail bridge 0.6 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 17, 21, Oct. 24 to Nov. 5, Nov. 10 to Dec. 25, Jan. 2 to Mar. 31, Apr. 2-5. Records good except for estimated daily discharges, which are poor. Transmountain diversions above station through Berthoud Pass ditch (see elsewhere in this report) and to Moffat water tunnel (not known since 1968). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 820 ft³/s, June 13, 1918, gage height, 2.9 ft; minimum daily determined, 2.0 ft³/s, Mar. 30, Apr. 9, 1912, Jan 23, 1915.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 196 ft³/s at 0500 June 9, gage height, 1.86 ft; minimum daily, 2.1 ft³/s, Aug. 16-17

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	10	7.5	5.1	4.0	5.0	6.5	20	23	18	5.3	11
2	6.6	10	7.5	5.0	4.0	5.0	6.6	24	22	23	4.5	6.8
3	6.9	10	7.5	5.0	4.0	5.0	6.6	23	23	23	3.4	5.9
4	8.6	10	7.5	5.0	4.0	5.4	6.6	23	24	25	3.0	13
5	12	10	7.5	5.0	4.0	5.4	6.6	25	22	25	4.5	11
6	9.7	8.4	7.5	5.0	4.0	5.4	7.0	23	21	25	5.5	7.0
7	7.9	8.4	7.5	5.0	4.0	5.4	9.1	24	49	24	5.0	5.8
8	8.2	8.5	7.5	5.0	4.0	5.4	11	27	133	23	4.7	5.2
9	7.9	9.6	7.0	5.0	4.0	5.4	10	23	178	16	4.1	4.2
10	7.7	9.5	7.0	5.0	4.0	5.4	11	27	189	6.5	3.9	3.3
11	7.3	9.5	7.0	5.0	4.5	5.4	12	24	123	9.2	3.7	3.4
12	7.6	9.5	7.0	5.0	4.5	5.4	14	21	100	8.7	4.3	3.8
13	10	9.5	7.0	5.0	4.5	5.4	15	19	96	7.9	3.5	3.4
14	9.7	9.5	7.0	5.0	4.5	5.4	15	19	99	6.9	2.7	4.3
15	8.6	9.5	7.0	5.0	4.5	5.4	17	18	99	9.0	2.5	7.0
16	11	9.5	6.6	5.0	5.0	5.8	18	17	102	8.4	2.1	3.8
17	12	9.5	6.6	5.0	5.0	5.8	16	20	96	7.3	2.1	3.4
18	12	9.5	6.6	5.0	5.0	5.8	17	19	80	8.4	2.2	3.4
19	13	9.5	6.6	5.0	5.0	5.8	14	18	55	11	2.8	3.5
20	12	9.5	6.4	5.0	5.0	6.0	13	21	47	11	2.3	3.4
21	12	8.5	6.4	4.5	5.0	6.0	12	22	39	17	2.7	2.3
22	9.5	8.5	6.4	4.5	5.0	6.0	11	23	31	6.8	2.7	4.0
23	11	8.5	6.4	4.5	5.0	6.0	11	24	19	4.3	2.5	2.8
24	10	8.5	6.0	4.5	5.0	6.0	10	26	15	3.7	2.2	2.6
25	10	7.5	5.8	4.5	5.0	6.0	10	23	21	3.4	2.5	3.2
26	10	7.5	5.8	4.0	5.0	6.0	9.8	23	20	3.0	2.5	2.8
27	10	7.5	5.7	4.0	5.0	6.0	11	24	13	2.5	4.0	3.4
28	10	7.5	5.6	4.0	5.0	6.0	14	26	11	2.4	4.0	4.1
29	10	7.5	5.6	4.0	---	6.5	14	25	9.5	4.0	3.3	3.9
30	10	7.5	5.4	4.0	---	6.5	17	24	22	5.1	3.1	3.6
31	10	---	5.6	4.0	---	6.5	---	23	---	4.2	4.3	---
TOTAL	297.6	268.4	206.5	146.6	127.5	176.5	351.8	698	1781.5	352.7	105.9	145.3
MEAN	9.60	8.95	6.66	4.73	4.55	5.69	11.7	22.5	59.4	11.4	3.42	4.84
MAX	13	10	7.5	5.1	5.0	6.5	18	27	189	25	5.5	13
MIN	6.4	7.5	5.4	4.0	4.0	5.0	6.5	17	9.5	2.4	2.1	2.3
AC-FT	590	532	410	291	253	350	698	1380	3530	700	210	288

CAL YR 1984 TOTAL 17182.4 MEAN 46.9 MAX 358 MIN 5.4 AC-FT 34080
WTR YR 1985 TOTAL 4658.3 MEAN 12.8 MAX 189 MIN 2.1 AC-FT 9240

NOTE.--NO GAGE-HEIGHT RECORD NOV. 10 TO DEC. 25, JAN. 2 TO MAR. 31.

09025000 VASQUEZ CREEK NEAR WINTER PARK, CO

LOCATION.--Lat 39°55'13", long 105°47'05", in NE¼NW¼ sec.33. T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 30 ft downstream from bridge on U.S. Highway 40, 0.2 mi upstream from mouth, 2.5 mi northwest of Winter Park, 2.5 mi southeast of Fraser, and 4.5 mi downstream from Moffat water tunnel diversion.

DRAINAGE AREA.--27.8 mi².

PERIOD OF RECORD.--June to August 1907, July to November 1909, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for June to October 1908, published in WSP 269, are unreliable and should not be used. Published as Vasquez River at lower station, near Fraser 1907-9, and as "near West Portal" 1934-39. Records for May 26, 1937, to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--See PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8,768.48 ft above National Geodetic Vertical Datum of 1929. June 1, 1907, to Oct. 31, 1909, nonrecording gage at site 0.8 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 17 to Nov. 6, Nov. 16 to Dec. 17, Dec. 19-28, Jan. 2-12, Jan. 25 to Feb. 12, Feb. 16, 19-22, Feb. 25 to Mar. 10. Records good except for estimated daily discharges, which are poor. Transmountain diversions above station to Moffat water tunnel not known since 1959. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 526 ft³/s, June 27, 1983, gage height, 4.14 ft, from rating curve extended above 286 ft³/s; no flow at times in 1944, 1946, 1956, 1960, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 254 ft³/s at 2000 June 9, gage height, 3.19 ft; minimum daily, 1.8 ft³/s, Jan. 19-21, Mar. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	7.2	3.4	2.3	2.5	2.4	5.0	15	16	14	7.0	8.2
2	6.5	7.2	3.4	2.3	2.5	2.4	7.1	21	16	11	7.7	8.1
3	6.2	7.2	3.4	2.3	2.5	2.4	9.1	25	15	8.2	8.2	8.6
4	7.0	7.2	3.4	2.3	2.5	2.4	8.2	27	15	8.3	8.2	8.9
5	8.3	7.2	3.4	2.3	2.5	2.4	7.0	29	15	8.3	8.3	8.6
6	7.0	7.2	2.9	2.3	2.5	2.4	8.7	26	14	8.0	8.3	8.1
7	6.4	7.5	2.9	2.3	2.5	2.4	11	21	15	8.1	8.2	8.2
8	6.4	7.5	2.9	2.3	2.5	2.4	14	22	64	7.6	7.8	8.2
9	6.3	7.7	2.9	2.3	2.5	2.4	15	22	194	7.1	7.6	8.1
10	6.3	8.8	2.9	2.3	2.5	2.4	15	22	176	7.0	7.4	8.2
11	6.2	8.5	2.6	2.3	2.5	2.3	5.6	22	120	7.1	7.7	8.3
12	6.4	7.9	2.6	2.3	2.5	1.8	5.8	20	84	7.4	7.9	8.5
13	7.0	8.0	2.6	2.4	2.3	1.9	6.8	18	59	7.5	7.6	8.3
14	7.1	7.3	2.6	2.2	2.1	2.3	7.8	17	36	7.8	7.7	8.1
15	6.6	6.7	2.6	2.2	2.2	2.6	9.6	17	34	7.2	8.1	6.9
16	6.7	6.6	2.4	2.2	2.4	2.5	10	19	33	6.6	7.7	4.1
17	8.0	6.6	2.4	2.2	2.4	2.8	9.9	19	55	6.4	7.7	3.8
18	8.0	6.6	2.4	2.1	2.5	3.2	11	21	69	7.3	7.8	3.7
19	8.0	6.6	2.4	1.8	2.4	3.2	12	20	60	10	7.7	3.6
20	8.0	6.6	2.4	1.8	2.4	3.4	12	19	53	10	7.2	3.6
21	8.0	5.0	2.4	1.8	2.4	3.6	11	20	52	11	7.3	3.6
22	8.0	5.0	2.4	2.0	2.4	3.5	11	20	44	7.7	7.4	4.5
23	8.0	5.0	2.4	2.1	2.4	3.6	10	20	37	8.4	7.2	4.0
24	8.0	5.0	2.4	2.4	2.2	4.3	9.5	20	34	8.1	7.2	4.0
25	8.0	5.0	2.4	2.3	2.4	4.9	9.0	19	38	7.8	7.4	4.0
26	7.2	4.0	2.4	2.3	2.4	4.4	8.7	19	40	7.9	7.7	4.2
27	7.2	4.0	2.4	2.3	2.4	4.2	9.0	18	45	7.8	8.3	4.4
28	7.2	4.0	2.4	2.3	2.4	4.4	10	18	38	7.6	8.4	5.1
29	7.2	4.0	2.3	2.3	---	4.6	12	17	26	7.4	7.9	5.0
30	7.2	4.0	2.3	2.3	---	5.9	12	16	8.0	7.2	9.0	4.4
31	7.2	---	2.5	2.3	---	6.1	---	16	---	7.2	9.1	---
TOTAL	222.0	191.1	82.8	68.9	67.7	99.5	292.8	625	1505.0	253.0	242.7	185.3
MEAN	7.16	6.37	2.67	2.22	2.42	3.21	9.76	20.2	50.2	8.16	7.83	6.18
MAX	8.3	8.8	3.4	2.4	2.5	6.1	15	29	194	14	9.1	8.9
MIN	6.2	4.0	2.3	1.8	2.1	1.8	5.0	15	8.0	6.4	7.0	3.6
AC-FT	440	379	164	137	134	197	581	1240	2990	502	481	368

CAL YR 1984 TOTAL 12732.5 MEAN 34.8 MAX 256 MIN 2.3 AC-FT 25250
WTR YR 1985 TOTAL 3835.8 MEAN 10.5 MAX 194 MIN 1.8 AC-FT 7610

09025400 ELK CREEK NEAR FRASER, CO

LOCATION.--Lat 39°55'09", long 105°49'31", in SE¼NW¼ sec.31, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 100 ft upstream from unnamed tributary 1,150 ft downstream from West Elk Creek, 2.0 mi southwest of Fraser, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--7.15 mi^2.

PERIOD OF RECORD.--September 1970 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,805 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 17, Nov. 2-5, Nov. 19 to Mar. 6, Aug. 29 to Sept. 9. Records good except for estimated daily discharges, which are poor. Transmountain diversions above station to Moffat water tunnel. Diversions for irrigation of about 100 acres of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 106 ft^3/s, May 24, 1984, gage height, 3.13 ft; minimum daily, 0.10 ft^3/s, Jan. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34 ft^3/s at 2205 June 8, gage height, 2.37 ft; minimum daily, 0.24 ft^3/s, Mar. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	.52	.60	.60	.60	.45	.38	8.5	3.2	6.4	1.8	.62
2	1.7	.52	.60	.60	.60	.44	.42	10	2.8	5.4	1.9	.66
3	.68	.52	.60	.60	.60	.42	.48	11	2.7	4.7	1.6	.70
4	.61	.52	.60	.60	.60	.41	.50	12	2.5	5.6	1.2	.74
5	.87	.52	.60	.60	.60	.39	.46	14	2.3	5.2	1.1	.78
6	.94	.50	.60	.60	.60	.37	.48	14	2.1	5.0	1.2	.82
7	.66	.50	.60	.60	.60	.34	.55	14	1.9	4.5	1.2	.86
8	.60	.50	.60	.60	.60	.24	.74	15	22	4.3	1.2	.90
9	.63	.51	.60	.60	.60	.26	.81	14	27	4.1	1.2	.95
10	.56	.49	.60	.60	.60	.28	.78	15	26	4.1	1.2	.99
11	.54	.48	.60	.60	.60	.30	1.1	15	23	4.1	1.2	1.2
12	.56	.48	.60	.60	.60	.31	1.2	13	22	3.8	1.2	1.5
13	.78	.46	.60	.60	.60	.33	2.1	12	21	3.5	1.2	.65
14	.81	.51	.60	.60	.60	.34	3.4	10	21	3.2	1.3	.46
15	.70	.50	.60	.60	.60	.34	4.6	9.6	21	3.0	1.4	.49
16	.66	.52	.60	.60	.60	.34	4.1	9.4	20	2.8	.88	.87
17	.62	.52	.60	.60	.60	.33	3.8	9.8	20	2.6	.81	1.0
18	.55	.51	.60	.60	.60	.34	5.0	9.8	18	2.6	.73	.84
19	.54	.52	.60	.60	.60	.33	4.3	9.2	17	3.4	.75	.83
20	.54	.52	.60	.60	.60	.34	3.3	8.8	15	4.1	.81	.79
21	.53	.52	.60	.60	.60	.35	2.4	8.4	15	4.1	.75	.80
22	.53	.54	.60	.60	.60	.35	2.5	7.8	13	4.1	.75	.96
23	.53	.55	.60	.60	.60	.34	2.7	7.4	11	4.2	.70	1.0
24	.54	.56	.60	.60	.58	.35	2.5	7.1	11	4.3	.66	.89
25	.52	.57	.60	.60	.56	.37	2.5	6.5	11	4.3	.60	.96
26	.53	.58	.60	.60	.52	.37	2.5	6.0	11	3.0	.53	.85
27	.52	.60	.60	.60	.49	.37	4.2	5.7	10	1.8	.50	.58
28	.50	.60	.60	.60	.47	.36	5.6	5.3	9.1	1.8	.50	.64
29	.51	.60	.60	.60	---	.36	5.3	5.0	6.3	1.8	.54	.62
30	.53	.60	.60	.60	---	.36	7.2	4.2	3.9	1.8	.56	.61
31	.57	---	.60	.60	---	.36	---	3.5	---	1.8	.60	---
TOTAL	21.16	15.84	18.60	18.60	16.42	10.84	75.90	301.0	391.8	115.4	30.57	24.56
MEAN	.68	.53	.60	.60	.59	.35	2.53	9.71	13.1	3.72	.99	.82
MAX	1.8	.60	.60	.60	.60	.45	7.2	15	27	6.4	1.9	1.5
MIN	.50	.46	.60	.60	.47	.24	.38	3.5	1.9	1.8	.50	.46
AC-FT	42	31	37	37	33	22	151	597	777	229	61	49

CAL YR 1984 TOTAL 2673.33 MEAN 7.30 MAX 95 MIN .34 AC-FT 5300
WTR YR 1985 TOTAL 1040.69 MEAN 2.85 MAX 27 MIN .24 AC-FT 2060

NOTE.--NO GAGE-HEIGHT RECORD NOV. 22 TO MAR. 6.

09026500 ST. LOUIS CREEK NEAR FRASER, CO

LOCATION.--Lat 39°54'36", long 105°52'40", in SE¼SW¼ sec.34, T.1 S., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 300 ft downstream from West St. Louis Creek and 4.1 mi southwest of Fraser.

DRAINAGE AREA.--32.9 mi².

PERIOD OF RECORD.--October 1933 to current year. Prior to August 1934, monthly discharge only, published in WSP 1313. Records for May 1956 to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,980.17 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 16-19, 24-29, Nov. 5, 9, 10, 12-28, Dec. 22-27, Jan. 2 to Apr. 18. Records good except for estimated daily discharges, which are poor. Transmountain diversions above station to Moffat water tunnel not known since 1959. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 470 ft³/s, June 15, 1952, gage height, 2.89 ft; maximum gage height, 3.21 ft, June 10, 1952 (backwater from log on control); minimum discharge not determined, probably occurred during January or February 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 345 ft³/s at 1900 June 8, gage height, 2.45 ft; minimum daily, 6.0 ft³/s, Mar. 12-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	8.8	9.5	8.5	8.2	6.5	8.0	15	38	40	21	14
2	9.2	9.4	9.3	8.2	8.2	6.5	8.1	17	37	31	22	16
3	9.1	8.9	8.8	8.2	8.2	6.5	8.2	20	38	31	20	15
4	9.8	9.5	8.6	8.2	8.2	6.5	8.3	23	39	30	20	17
5	11	9.5	8.5	8.2	8.2	6.5	8.4	24	41	29	20	15
6	10	9.3	8.5	8.2	7.8	6.5	8.5	24	46	28	20	14
7	9.8	8.8	8.5	8.2	7.8	6.5	8.5	25	56	28	19	13
8	9.9	8.9	8.5	8.2	7.5	6.5	8.8	26	161	28	20	14
9	9.7	9.5	8.7	8.2	7.5	6.5	9.0	27	272	30	20	13
10	9.7	9.5	8.5	8.2	7.5	6.5	9.2	29	260	31	19	12
11	9.6	9.6	8.3	8.2	7.5	6.5	9.4	28	230	30	19	13
12	9.5	9.5	8.4	8.2	7.5	6.0	9.6	26	212	29	20	13
13	9.8	9.5	8.4	8.2	7.0	6.0	9.7	25	212	30	19	12
14	9.9	9.5	8.4	8.2	7.0	6.0	9.8	23	215	29	18	12
15	9.2	9.5	8.3	8.2	7.0	6.5	10	26	208	30	18	12
16	9.5	9.5	8.3	8.2	7.0	6.5	11	31	210	31	17	9.6
17	9.5	9.5	8.3	8.2	7.0	7.0	11	33	210	32	17	8.5
18	9.5	9.5	8.4	8.2	7.0	7.0	12	32	200	34	17	8.4
19	9.5	9.5	8.3	8.2	7.0	7.0	11	33	186	38	17	8.3
20	9.8	9.5	8.2	8.2	7.0	7.0	10	32	149	38	17	8.2
21	10	9.5	8.2	8.2	7.0	7.0	9.5	32	122	45	17	8.4
22	9.6	9.5	8.2	8.2	7.0	7.0	8.8	33	114	36	17	9.5
23	9.8	9.5	8.2	8.2	7.0	7.0	9.3	33	94	33	16	9.0
24	9.5	9.5	8.2	8.2	7.0	7.0	9.1	36	79	29	15	8.7
25	9.5	9.5	8.2	8.2	7.0	8.0	9.0	37	82	31	14	8.8
26	9.5	9.5	8.2	8.2	7.0	8.0	9.1	38	81	34	14	7.8
27	9.5	9.5	8.2	8.2	6.5	8.0	9.6	38	97	34	14	8.5
28	9.5	9.5	8.6	8.2	6.5	8.0	11	39	105	32	14	11
29	9.5	9.9	8.3	8.2	---	8.0	11	39	74	30	14	9.2
30	9.2	9.7	8.7	8.2	---	8.0	13	37	48	25	13	9.0
31	9.0	---	8.5	8.2	---	8.0	---	37	---	22	13	---
TOTAL	297.7	282.8	262.2	254.5	205.1	214.5	287.9	918	3916	978	541	337.9
MEAN	9.60	9.43	8.46	8.21	7.32	6.92	9.60	29.6	131	31.5	17.5	11.3
MAX	11	9.9	9.5	8.5	8.2	8.0	13	39	272	45	22	17
MIN	9.0	8.8	8.2	8.2	6.5	6.0	8.0	15	37	22	13	7.8
AC-FT	590	561	520	505	407	425	571	1820	7770	1940	1070	670

CAL YR 1984 TOTAL 15000.7 MEAN 41.0 MAX 292 MIN 5.4 AC-FT 29750
WTR YR 1985 TOTAL 8495.6 MEAN 23.3 MAX 272 MIN 6.0 AC-FT 16850

NOTE.--NO GAGE-HEIGHT RECORD JAN. 2 TO APR. 18.

09032000 RANCH CREEK NEAR FRASER, CO

LOCATION.--Lat 39°57'00", long 105°45'54", in NW¼NE¼ sec.22, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 450 ft downstream from Middle Fork and 2.7 mi east of Fraser.

DRAINAGE AREA.--19.9 mi².

PERIOD OF RECORD.--August 1934 to current year. Records since May 15, 1949, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--WSP 1243: 1935.

GAGE.--Water-stage recorder. Elevation of gage is 8,685 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 16-17, 24-26, Nov. 2, 4-5, 10, 12-13, 15-17, Nov. 21 to Dec. 2, Dec. 12-14, Jan. 25 to Feb. 16, Mar. 22, 28, Apr. 5. Records good except for estimated daily discharges, which are poor. Diversion above station for irrigation of hay meadows along Fraser River. Transmountain diversion above station to Moffat water tunnel . Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 451 ft³/s, June 27, 1983, gage height, 3.96 ft; minimum daily, 0.4 ft³/s, Sept. 21, Oct. 6, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 213 ft³/s at 2100 June 9, gage height, 3.00 ft; minimum daily, 2.1 ft³/s, Mar. 23, 27, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	3.7	3.6	3.2	2.6	2.2	2.2	11	15	10	4.7	4.4
2	4.1	3.7	3.6	3.1	2.5	2.2	2.4	14	14	5.4	4.7	4.6
3	4.3	3.7	3.4	3.1	2.4	2.2	2.7	16	16	4.7	4.6	4.1
4	5.0	3.7	3.4	3.1	2.4	2.2	2.5	18	19	4.1	4.5	5.2
5	7.7	3.7	3.3	3.1	2.4	2.2	2.3	19	22	3.9	4.6	4.2
6	6.0	3.7	3.2	3.1	2.4	2.2	2.2	20	18	3.7	4.6	3.7
7	4.8	3.7	3.2	3.1	2.4	2.2	2.5	20	44	3.6	4.5	4.1
8	4.3	3.5	3.2	3.1	2.4	2.2	3.2	22	111	3.8	4.4	4.2
9	4.3	3.4	3.2	3.1	2.4	2.2	2.8	21	157	3.7	4.4	5.0
10	4.1	3.4	3.2	3.1	2.4	2.2	3.1	22	192	3.8	4.3	6.0
11	4.1	3.4	3.2	3.1	2.4	2.3	3.9	22	169	3.8	4.5	4.4
12	4.4	3.5	3.2	2.9	2.4	2.4	3.7	20	153	3.7	4.8	4.4
13	5.5	3.5	3.2	2.8	2.4	2.4	4.3	19	149	3.7	4.7	3.8
14	5.1	3.6	3.2	2.8	2.4	2.4	5.5	17	145	3.3	4.6	3.7
15	4.9	3.6	3.2	2.8	2.4	2.4	6.3	17	143	3.3	4.4	3.9
16	4.8	3.6	3.2	2.8	2.4	2.2	6.6	18	141	3.5	4.2	3.9
17	4.6	3.6	3.2	2.9	2.4	2.2	6.7	18	136	3.4	4.2	3.2
18	4.4	3.6	3.2	2.9	2.4	2.2	7.5	18	123	3.7	4.2	3.2
19	4.3	3.4	3.2	2.9	2.2	2.2	7.4	18	107	7.5	4.3	3.2
20	4.1	3.5	3.2	2.8	2.2	2.2	7.7	18	98	5.0	4.2	3.2
21	4.0	3.5	3.1	2.8	2.2	2.2	6.4	18	93	5.7	4.1	3.2
22	4.1	3.5	3.1	2.8	2.2	2.2	6.3	18	67	4.5	4.1	4.0
23	4.2	3.5	3.1	2.8	2.2	2.1	6.7	18	33	6.2	3.9	3.8
24	4.1	3.5	3.2	2.8	2.2	2.2	5.6	18	29	8.3	3.8	3.7
25	4.0	3.5	3.2	2.7	2.2	2.3	5.4	18	31	6.0	3.7	3.7
26	4.0	3.6	3.2	2.6	2.2	2.3	5.3	20	52	5.3	3.6	3.6
27	3.9	3.6	3.2	2.6	2.2	2.1	6.6	25	64	5.1	3.7	3.7
28	4.0	3.6	3.2	2.6	2.2	2.2	7.6	30	55	4.7	3.8	5.7
29	3.9	3.6	3.2	2.6	---	2.2	7.9	27	49	5.3	3.7	6.2
30	3.8	3.6	3.1	2.6	---	2.2	8.9	23	28	5.2	3.6	6.7
31	3.7	---	3.1	2.6	---	2.1	---	19	---	4.7	3.5	---
TOTAL	138.4	107.0	100.0	89.3	65.5	69.0	152.2	602	2473	148.6	130.9	126.7
MEAN	4.46	3.57	3.23	2.88	2.34	2.23	5.07	19.4	82.4	4.79	4.22	4.22
MAX	7.7	3.7	3.6	3.2	2.6	2.4	8.9	30	192	10	4.8	6.7
MIN	3.7	3.4	3.1	2.6	2.2	2.1	2.2	11	14	3.3	3.5	3.2
AC-FT	275	212	198	177	130	137	302	1190	4910	295	260	251

CAL YR 1984 TOTAL 10673.6 MEAN 29.2 MAX 250 MIN 2.2 AC-FT 21170
WTR YR 1985 TOTAL 4202.6 MEAN 11.5 MAX 192 MIN 2.1 AC-FT 8340

09032100 CABIN CREEK NEAR FRASER, CO

LOCATION.--Lat 39°59'09", long 105°44'40", in NW¼SE¼ sec.2, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 200 ft downstream from concrete diversion dam, 2.7 mi upstream from mouth and 4.6 mi northeast of Fraser.

DRAINAGE AREA.--4.87 mi^2.

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 25 to Apr. 24. Records good except for estimated daily discharges, which are poor. Transmountain diversion above station to Moffat water tunnel (not furnished by Colorado Division of Water resources). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 126 ft^3/s June 13, 1984, gage height, 2.37 ft; minimum daily, 0.04 ft^3/s May 7, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 84 ft^3/s at 1900 June 8, gage height, 2.05 ft; minimum daily, 0.04 ft^3/s May 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	.52	.47	.47	.49	.17	.08	.09	.35	13	8.4	3.5
2	2.7	.50	.47	.47	.45	.17	.08	.09	.99	13	8.0	3.6
3	2.6	.50	.47	.47	.43	.17	.08	.09	1.8	12	7.4	3.1
4	2.7	.49	.47	.47	.41	.17	.08	.09	4.0	12	7.1	4.7
5	8.5	.48	.47	.49	.39	.15	.08	.09	7.2	11	6.8	3.4
6	5.0	.48	.47	.50	.37	.15	.08	.07	14	11	6.6	3.0
7	2.5	.48	.47	.54	.35	.15	.08	.04	52	10	6.2	3.6
8	2.4	.47	.47	.58	.33	.15	.08	3.1	64	10	5.9	3.7
9	2.3	.47	.47	.60	.32	.15	.08	2.5	65	9.7	5.8	3.2
10	2.3	.47	.47	.64	.30	.13	.08	1.6	55	9.4	5.5	3.0
11	2.3	.47	.47	.64	.30	.13	.08	.76	46	8.9	5.4	4.1
12	2.4	.47	.47	.64	.30	.13	.07	.54	43	8.7	6.1	4.0
13	2.5	.47	.47	.64	.30	.13	.07	.54	41	8.7	5.2	3.4
14	2.4	.47	.47	.64	.30	.13	.07	.46	41	8.2	5.0	3.2
15	2.6	.47	.47	.70	.30	.13	.07	.37	41	7.8	4.7	3.6
16	2.5	.47	.47	.70	.30	.11	.07	.35	40	7.3	4.4	3.6
17	2.5	.47	.47	.70	.29	.11	.07	.35	38	7.3	4.2	3.3
18	1.5	.47	.47	.70	.28	.11	.07	.35	33	7.5	4.2	3.3
19	1.2	.47	.47	.70	.27	.11	.07	.35	30	9.7	4.1	3.2
20	.94	.47	.47	.70	.25	.10	.07	.55	28	10	3.9	3.2
21	.88	.47	.47	.70	.24	.09	.08	.74	27	11	3.7	3.2
22	.77	.47	.47	.69	.22	.09	.08	.74	25	9.6	3.6	3.8
23	.72	.47	.47	.64	.22	.09	.08	.95	22	11	3.5	3.6
24	.72	.47	.47	.60	.20	.09	.08	1.2	21	9.9	3.3	3.6
25	.68	.47	.47	.55	.19	.09	.09	1.4	22	9.4	3.2	3.5
26	.66	.47	.47	.55	.19	.08	.09	3.6	20	9.9	3.1	4.0
27	.62	.47	.47	.55	.18	.08	.09	6.3	17	9.4	3.1	4.4
28	.60	.47	.47	.55	.17	.08	.09	8.8	16	9.0	3.0	4.6
29	.58	.47	.47	.55	---	.08	.09	5.9	15	8.9	2.9	4.3
30	.56	.47	.47	.52	---	.08	.09	5.2	14	8.9	2.9	4.6
31	.54	---	.47	.50	---	.08	---	2.5	---	8.6	2.8	---
TOTAL	61.47	14.26	14.57	18.39	8.34	3.68	2.37	49.71	844.34	300.8	150.0	109.3
MEAN	1.98	.48	.47	.59	.30	.12	.08	1.60	28.1	9.70	4.84	3.64
MAX	8.5	.52	.47	.70	.49	.17	.09	8.8	65	13	8.4	4.7
MIN	.54	.47	.47	.47	.17	.08	.07	.04	.35	7.3	2.8	3.0
AC-FT	122	28	29	36	17	7.3	4.7	99	1670	597	298	217

CAL YR 1984 TOTAL 3939.00 MEAN 10.8 MAX 96 MIN .47 AC-FT 7810
WTR YR 1985 TOTAL 1577.23 MEAN 4.32 MAX 65 MIN .04 AC-FT 3130

NOTE.--NO GAGE-HEIGHT RECORD NOV. 7 TO APR. 24.

09034250 COLORADO RIVER AT WINDY GAP NEAR GRANBY, COLORADO

LOCATION.--Lat 40°06'30", long 106°00'13" in NW¼ sec.27, R.77 W., T.2 N., Grand County, Hydrologic Unit 14010001, on right bank 300 ft downstream from county highway bridge, 2.4 mi downstream from mouth of Fraser River and 3.8 mi northwest of Granby.

DRAINAGE AREA.--789 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,790 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 23-24, Nov. 26 to Mar. 24, Mar. 26-30, Apr. 3-7. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft³/s, May 25, 1984, gage height, 7.34 ft; minimum daily, 42 ft³/s, Oct. 11, 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,880 ft³/s at 1300 June 10, gage height, 4.90 ft; minimum daily, 64 ft³/s, Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	158	169	120	110	110	110	115	397	786	352	203	97
2	142	132	120	110	110	110	153	486	760	333	216	103
3	144	153	120	110	110	110	160	487	703	274	203	103
4	142	153	120	110	110	110	170	590	639	285	203	97
5	169	139	120	110	110	100	180	653	591	273	207	94
6	212	150	120	110	110	94	230	726	606	279	177	75
7	185	150	120	110	110	94	333	932	638	285	165	64
8	177	115	120	110	110	94	414	824	835	213	157	75
9	173	86	120	110	110	94	459	856	1490	104	161	78
10	153	88	120	110	110	94	445	1060	1790	94	139	78
11	98	135	120	110	110	94	473	1140	1690	94	142	80
12	103	157	120	110	110	94	487	992	1480	94	150	83
13	133	153	120	110	110	94	452	805	1340	152	146	68
14	180	229	120	110	110	94	445	703	1210	194	135	71
15	173	110	120	110	110	94	487	743	1120	161	128	73
16	165	86	120	110	110	92	502	854	1070	239	125	78
17	173	149	120	110	110	92	481	899	1000	261	122	78
18	128	135	120	110	110	92	466	944	848	273	125	80
19	86	173	120	110	110	92	466	944	770	357	125	78
20	103	165	120	110	110	92	353	926	687	423	118	71
21	164	135	120	110	110	92	333	899	577	472	112	71
22	203	122	120	110	110	92	321	872	531	359	112	78
23	190	120	120	110	110	92	296	846	453	393	112	88
24	133	120	120	110	110	92	308	811	411	352	109	83
25	180	118	120	110	110	88	308	811	479	333	103	80
26	119	120	120	110	110	98	296	811	473	302	103	73
27	165	120	120	110	110	110	285	820	487	308	100	73
28	169	120	120	110	110	110	308	829	480	296	97	86
29	161	120	120	110	---	110	333	820	432	296	100	109
30	72	120	120	110	---	110	352	803	379	290	103	94
31	170	---	120	110	---	109	---	786	---	245	97	---
TOTAL	4723	4042	3720	3410	3080	3043	10411	25069	24755	8386	4295	2459
MEAN	152	135	120	110	110	98.2	347	809	825	271	139	82.0
MAX	212	229	120	110	110	110	502	1140	1790	472	216	109
MIN	72	86	120	110	110	88	115	397	379	94	97	64
AC-FT	9370	8020	7380	6760	6110	6040	20650	49720	49100	16630	8520	4880

CAL YR 1984	TOTAL	268851	MEAN	735	MAX	4930	MIN	72	AC-FT	533300
WTR YR 1985	TOTAL	97393	MEAN	267	MAX	1790	MIN	64	AC-FT	193200

NOTE.--NO GAGE-HEIGHT RECORD NOV. 26 to MAR. 24.

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO

LOCATION.--Lat 40°05'00", long 106°05'15", in NE¼NE¼ sec.2, T.1 N., R.78W., Grand County, Hydrologic Unit 14010001, on left bank about 1,000 ft north of U.S. Highway 40, 1 mi northeast of Hot Sulphur Springs, and 4.5 mi upstream from Beaver Creek.

DRAINAGE AREA.--825 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1904 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to 1907 and 1914-18, published as Grand River at Hot Sulphur Springs, and as Grand River at Sulphur Springs 1907-13.

REVISED RECORDS.--WSP 1313: 1905. WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,670 ft, from railroad elevations. July 28, 1904, to Apr. 16, 1906, nonrecording gage on bridge 1.7 mi downstream at different datum. Apr. 17, 1906, to Sept. 18, 1930, nonrecording gage at bridge 1.4 mi downstream at datum 7,651.26 ft, National Geodetic Vertical Datum of 1929. Supplemental water-stage recorder (nonrecording gage prior to Jan. 1, 1963) at different datum at site 1.7 mi downstream, used for winter records some years.

REMARKS.--Estimated daily discharges: Nov. 28 to Apr. 5. Records good except for estimated daily discharges, which are poor. Flow affected by transmountain diversions, storage reservoirs, and diversions above station for irrigation of about 13,000 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 10,300 ft^3/s, June 15, 1921, gage height, 8.7 ft, site and datum then in use; minimum daily, 33 ft^3/s, Sept. 27, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,890 ft^3/s at 1500 June 10, gage height, 2.85 ft; minimum daily, 65 ft^3/s, Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	163	140	130	115	130	160	420	867	387	206	99
2	121	128	140	130	115	130	170	517	832	369	212	108
3	124	128	140	130	120	130	180	543	778	311	213	117
4	124	136	140	130	120	130	190	650	696	313	198	101
5	145	133	140	130	120	130	195	745	655	305	200	106
6	180	129	140	130	120	130	199	814	660	298	181	99
7	163	131	140	130	120	130	307	1020	688	308	167	71
8	151	112	140	130	120	130	432	935	898	260	161	83
9	149	77	140	120	120	130	488	971	1430	152	160	85
10	145	81	140	120	120	130	441	1130	1780	139	146	88
11	86	109	130	120	120	130	461	1200	1660	133	149	93
12	99	143	130	120	120	130	466	1070	1430	128	149	93
13	115	142	130	120	120	130	428	832	1330	165	149	70
14	158	196	130	120	130	140	420	748	1240	205	149	70
15	154	142	130	120	130	150	474	788	1150	164	149	70
16	141	75	130	120	130	150	489	898	1110	250	147	77
17	148	173	130	120	130	150	466	948	1030	277	146	78
18	128	133	130	120	130	150	477	976	896	287	146	77
19	80	155	130	120	130	150	488	983	823	380	147	68
20	89	160	130	120	130	150	369	971	741	447	129	65
21	136	133	130	120	130	150	340	940	607	496	109	66
22	168	112	130	120	130	150	322	928	563	380	107	69
23	173	114	130	120	130	150	303	913	486	399	105	80
24	128	119	130	120	130	150	319	878	438	381	109	76
25	146	113	130	120	130	150	315	884	501	357	109	73
26	127	124	130	120	130	150	301	886	493	335	112	70
27	128	143	130	120	130	150	288	902	513	335	115	67
28	139	140	130	120	130	150	308	910	495	305	119	80
29	149	140	130	115	---	150	350	910	460	321	112	104
30	69	140	130	115	---	150	368	885	414	296	112	94
31	121	---	130	115	---	150	---	867	---	250	96	---
TOTAL	4113	3924	4130	3785	3500	4380	10514	27062	25664	9133	4509	2497
MEAN	133	131	133	122	125	141	350	873	855	295	145	83.2
MAX	180	196	140	130	130	150	489	1200	1780	496	213	117
MIN	69	75	130	115	115	130	160	420	414	128	96	65
AC-FT	8160	7780	8190	7510	6940	8690	20850	53680	50900	18120	8940	4950

CAL YR 1984 TOTAL 271481 MEAN 742 MAX 5310 MIN 69 AC-FT 538500
WTR YR 1985 TOTAL 103211 MEAN 283 MAX 1780 MIN 65 AC-FT 204700

NOTE.--NO GAGE.HEIGHT RECORD FEB. 1 TO APR. 5.

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1947 to current year.
WATER TEMPERATURES: April 1949 to current year.

REMARKS.--Limited temperature data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 400 microsiemens Feb. 5, 1974; minimum daily, 48 microsiemens June 2, 1947.
WATER TEMPERATURES: Maximum, 29°C Aug. 3, 1981; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 249 microsiemens Nov. 29; minimum daily, 73 microsiemens June 10.
WATER TEMPERATURES: Maximum, 22°C Aug. 26; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	NITROGEN DISSOLVED (MG/L AS N)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
DEC												
18...	10:15	131	128	7.9	0.0	10.9	--	55	17	3.1	6.4	0.4
MAR												
28...	18:00	149	146	7.4	0.0	10.0	--	68	21	3.8	8.6	0.5
JUN												
26...	10:00	498	125	7.5	12.0	8.9	--	54	17	2.7	5.1	0.3
SEP												
11...	15:00	87	120	8.5	12.0	9.2	0.4	57	18	3.0	6.9	0.4

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)
DEC												
18...	1.1	60	9.3	1.6	0.2	13	88	0.12	31	0.20	0.17	0.2
MAR												
28...	2.4	64	13	4.5	0.2	13	110	0.14	42	0.30	0.26	0.9
JUN												
26...	1.2	--	7.4	1.0	0.2	12	--	--	--	<0.10	<0.10	0.5
SEP												
11...	1.5	62	6.3	1.6	0.2	11	86	0.12	20	<0.10	<0.10	0.3

DATE	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
DEC											
18...	0.3	0.4	0.03	0.03	<1	<1	<1	<1	28	<1	2
MAR											
28...	0.6	1.2	0.12	0.08	<1	<1	<1	<1	3	<1	3
JUN											
26...	0.4	--	0.04	0.03	<1	<1	<1	<1	2	<1	3
SEP											
11...	0.4	0.3	0.05	0.04	<1	<1	1	<1	2	<1	1

DATE	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
DEC											
18...	3	130	<1	<1	20	<0.1	<0.1	<1	<1	<10	13
MAR											
28...	2	150	3	<1	36	0.2	0.1	<1	<1	100	4
JUN											
26...	4	140	<1	5	23	<0.1	<0.1	<1	<1	80	45
SEP											
11...	2	93	4	2	14	<0.1	<0.1	<1	<1	10	9

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS,CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS PER CENTIMETER AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	183	142	140	169	135	162	136	92	127	138	125
2	180	156	171	143	153	134	143	113	90	129	140	123
3	165	194	143	143	140	135	143	108	96	139	136	124
4	156	196	140	141	137	138	142	113	104	137	137	125
5	154	164	151	141	138	143	143	99	104	153	132	134
6	152	150	132	115	144	138	143	115	104	144	133	138
7	156	245	129	135	138	138	149	100	102	140	134	138
8	144	177	127	128	138	139	130	98	89	155	133	142
9	146	155	196	133	140	139	143	92	77	152	131	---
10	160	151	154	132	---	141	144	91	73	164	133	142
11	153	241	---	130	137	138	140	90	80	158	133	142
12	203	135	122	142	171	141	133	102	83	157	134	145
13	153	149	123	165	136	143	133	95	85	169	132	145
14	160	172	126	138	140	145	137	98	77	148	131	143
15	148	138	128	137	---	146	130	95	84	150	135	144
16	158	202	125	135	136	146	123	90	82	146	129	144
17	148	222	123	133	140	147	127	93	82	145	128	145
18	174	175	---	133	---	149	122	93	83	143	127	145
19	160	220	131	133	---	149	118	95	85	144	127	148
20	159	133	169	133	---	147	128	95	87	148	129	146
21	160	151	121	133	---	154	133	94	93	141	127	147
22	162	137	102	132	143	158	146	90	95	143	144	148
23	167	---	132	138	132	164	143	88	103	142	130	---
24	190	122	---	142	134	169	152	97	110	139	145	148
25	175	140	---	139	135	174	146	88	116	140	146	148
26	186	122	125	137	132	160	139	90	120	142	128	151
27	160	144	---	140	133	162	142	91	113	140	154	150
28	168	151	---	137	137	162	140	94	110	138	126	152
29	184	249	132	136	---	164	129	88	114	136	127	---
30	169	119	125	138	---	159	128	88	118	134	---	149
31	160	---	95	134	---	156	---	89	---	135	147	---
MEAN	163	169	135	137	141	149	138	97	95	144	134	142

WTR YR 1985 MEAN 137 MAX 249 MIN 73

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	4.0	.0			.0	.0	11.0	11.0	15.0	20.0	18.0
2	11.0	9.0	.0			.0	.0	12.0	13.0	15.0	19.0	18.0
3	11.0	3.0	.0			.0	.0	12.0	12.0	18.0	19.0	17.0
4	10.0	2.0	.0			.0	.0	11.0	13.0	17.0	20.0	19.0
5	9.0	2.0	.0			.0	.0	10.0	14.0	15.0	20.0	17.0
6	10.0	3.0	.0			.0	.0	10.0	13.0	16.0	21.0	18.0
7	11.0	2.0	.0			.0	.0	10.0	15.0	19.0	20.0	13.0
8	11.0	5.0	.0			.0	.0	11.0	15.0	18.0	21.0	19.0
9	7.0	.0	.0			.0	2.0	9.0	12.0	20.0	21.0	---
10	6.0	.0	.0			.0	1.0	6.0	11.0	19.0	20.0	16.0
11	10.0	3.0	.0			.0	5.0	7.0	10.0	20.0	18.0	17.0
12	10.0	3.0	.0			.0	5.0	5.0	12.0	15.0	18.0	12.0
13	9.0	5.0	.0			.0	8.0	6.0	14.0	16.0	21.0	12.0
14	7.0	2.0	.0			.0	9.0	9.0	17.0	19.0	20.0	17.0
15	5.0	3.0	.0			.0	9.0	10.0	14.0	21.0	20.0	15.0
16	4.0	.0	.0			.0	7.0	10.0	14.0	18.0	19.0	17.0
17	5.0	.0	.0			.0	8.0	10.0	11.0	18.0	19.0	15.0
18	2.0	1.0	---			.0	7.0	11.0	11.0	19.0	16.0	13.0
19	1.0	.0	---			.0	3.0	9.0	14.0	16.0	18.0	12.0
20	5.0	.0	---			.0	2.0	11.0	13.0	16.0	19.0	12.0
21	5.0	.0	---			.0	9.0	10.0	15.0	16.0	19.0	13.0
22	5.0	.0	---			.0	8.0	10.0	15.0	16.0	20.0	10.0
23	6.0	---	---			.0	7.0	11.0	16.0	16.0	18.0	---
24	5.0	.0	---			.0	8.0	11.0	15.0	15.0	21.0	8.0
25	5.0	.0	---			.0	5.0	10.0	15.0	17.0	17.0	9.0
26	5.0	.0	---			.0	9.0	11.0	12.0	16.0	22.0	10.0
27	2.0	.0	---			.0	12.0	13.0	14.0	16.0	16.0	12.0
28	1.0	.0	---			.0	9.0	13.0	17.0	16.0	18.0	7.0
29	5.0	.0	---			.0	9.0	12.0	14.0	17.0	18.0	---
30	7.0	.0	---			.0	10.0	12.0	15.0	15.0	20.0	10.0
31	5.0	---	---			.0	---	11.0	---	20.0	11.0	---
MEAN	6.5	1.5	.0			.0	5.0	10.0	13.5	17.0	19.0	14.0

WTR YR 1985 MEAN 9.0 MAX 22.0 MIN .0

09034900 BOBTAIL CREEK NEAR JONES PASS, CO

LOCATION.--Lat 39°45'37", long 105°54'21", in sec.28, T.3 S., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 320 ft upstream from diversion dam and 0.4 mi south of entrance to August P. Gumlick Tunnel.

DRAINAGE AREA.--5.49 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,430 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 18 to Apr. 29, May 2-4. Records good except for estimated daily discharges, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 10.2 ft^3/s; 7,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 199 ft^3/s, June 25, 1983, gage height, 4.80 ft; maximum recorded gage height, 7.57 ft, May 15, 1984 (backwater from ice); minimum daily discharge, 0.44 ft^3/s, Feb. 11, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 8	1700	*195	*4.80	No other peak greater than base discharge.			

Minimum daily, 0.60 ft^3/s, Mar. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	3.0	2.0	1.4	1.0	.70	.90	4.8	28	23	14	2.6
2	6.1	2.9	2.0	1.3	.90	.70	.90	8.3	32	23	14	2.9
3	5.5	2.9	2.0	1.3	.90	.70	.90	11	33	23	13	3.2
4	6.6	2.9	2.0	1.3	.90	.70	.94	14	36	24	12	4.2
5	7.1	2.9	1.9	1.3	.90	.70	.94	16	44	24	10	3.3
6	6.9	2.8	1.8	1.3	.90	.70	.94	15	59	24	9.4	2.6
7	6.6	2.6	1.7	1.3	.90	.70	.94	13	91	24	8.9	2.9
8	5.9	2.6	1.7	1.3	.90	.70	1.0	17	117	23	8.1	2.7
9	6.1	2.6	1.6	1.3	.90	.70	1.0	18	106	23	8.0	2.6
10	5.7	2.6	1.5	1.3	.80	.70	1.1	18	83	22	7.1	2.4
11	5.7	2.6	1.5	1.3	.80	.66	1.1	17	63	22	6.9	2.7
12	5.5	2.6	1.5	1.3	.80	.62	1.2	13	57	23	8.1	2.7
13	6.1	2.6	1.5	1.3	.80	.60	1.3	11	59	24	6.1	2.4
14	5.7	2.6	1.5	1.2	.74	.64	1.5	11	59	22	5.5	2.2
15	7.1	2.6	1.5	1.2	.74	.68	1.7	10	61	20	5.0	3.2
16	8.1	2.6	1.5	1.2	.74	.70	2.0	9.7	61	19	4.8	2.4
17	7.6	2.6	1.5	1.2	.74	.72	2.3	9.9	57	18	4.5	1.9
18	6.0	2.6	1.5	1.2	.74	.74	2.7	11	53	20	4.8	2.4
19	6.0	2.6	1.5	1.2	.74	.74	2.7	11	48	24	4.4	2.1
20	6.0	2.5	1.5	1.1	.74	.74	2.5	10	46	28	3.8	1.8
21	5.4	2.4	1.5	1.1	.74	.74	2.2	10	50	34	3.5	1.7
22	4.8	2.3	1.5	1.1	.74	.78	2.0	11	44	27	3.5	2.2
23	4.5	2.2	1.5	1.1	.74	.80	2.0	16	39	26	3.3	2.6
24	4.2	2.1	1.5	1.1	.70	.80	2.0	22	37	24	2.9	2.2
25	4.1	2.0	1.5	1.1	.70	.80	2.0	25	41	22	2.6	2.4
26	4.0	2.0	1.5	1.1	.70	.80	2.0	25	33	21	2.7	4.4
27	3.8	2.0	1.5	1.1	.70	.84	2.1	30	28	20	2.9	3.3
28	3.7	2.0	1.5	1.1	.70	.86	2.1	38	26	18	2.7	5.0
29	3.5	2.0	1.5	1.1	---	.90	2.1	41	25	17	2.4	10
30	3.3	2.0	1.5	1.0	---	.90	2.7	36	23	17	2.4	4.1
31	3.2	---	1.4	1.0	---	.90	---	29	---	15	2.1	---
TOTAL	170.3	74.7	49.6	37.2	22.30	22.96	49.76	531.7	1539	694	189.4	91.1
MEAN	5.49	2.49	1.60	1.20	.80	.74	1.66	17.2	51.3	22.4	6.11	3.04
MAX	8.1	3.0	2.0	1.4	1.0	.90	2.7	41	117	34	14	10
MIN	3.2	2.0	1.4	1.0	.70	.60	.90	4.8	23	15	2.1	1.7
AC-FT	338	148	98	74	44	46	99	1050	3050	1380	376	181

CAL YR 1984	TOTAL	5716.6	MEAN	15.6	MAX	105	MIN	1.1	AC-FT	11340
WTR YR 1985	TOTAL	3472.02	MEAN	9.51	MAX	117	MIN	.60	AC-FT	6890

NOTE.--NO GAGE-HEIGHT RECORD NOV. 5 TO APR. 29.

09035500 WILLIAMS FORK BELOW STEELMAN CREEK, CO

LOCATION.--Lat 39°46'44", long 105°55'40", in sec.20, T.3 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 700 ft downstream from Steelman Creek and 6.5 mi southeast of Leal.

DRAINAGE AREA.--16.3 mi².

PERIOD OF RECORD.--July 1933 to September 1941, published as Williams River below Steelman Creek, October 1965 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 9,800 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 21, 1933, nonrecording gage, and July 21, 1933, to Sept. 30, 1941, water-stage recorder at site 600 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 16 to Apr. 29. Records fair except for estimated daily discharges, which are poor. Transmountain diversions above station through August P. Gumlick Tunnel (station 09036000) since May 10, 1940. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years, 26.2 ft³/s; 18,980 acre-ft/yr, including diversions to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441 ft³/s, June 21, 1938, gage height, 2.48 ft, site and datum then in use, from rating curve extended above 260 ft³/s; maximum gage height, 6.96 ft, May 15, 1984 (backwater from ice); minimum daily discharge, 0.20 ft³/s, Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 313 ft³/s at 1930 June 8, gage height, 5.51 ft; minimum daily, 0.29 ft³/s, July 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	9.5	7.0	3.4	3.4	4.0	9.0	2.5	72	36	11	.96
2	4.6	9.5	7.0	3.4	3.4	4.0	9.0	3.3	82	14	13	1.1
3	4.7	9.5	7.0	3.4	3.4	4.0	9.0	5.6	88	.54	1.1	1.1
4	6.7	9.5	5.0	3.4	3.4	4.0	9.0	7.3	96	.43	.99	1.8
5	14	9.5	4.5	3.4	3.4	4.0	9.0	8.5	116	.42	.94	1.3
6	21	9.5	4.0	3.4	3.4	4.0	9.0	7.7	140	.33	.95	1.0
7	20	9.5	3.5	3.4	3.4	4.0	9.0	7.1	180	.29	.96	1.1
8	18	9.5	3.4	3.4	3.4	4.0	9.0	12	218	33	1.0	1.1
9	19	9.5	3.4	3.4	3.4	4.0	9.0	10	214	55	1.0	.96
10	18	8.0	3.4	3.4	3.4	4.0	9.0	9.7	198	51	1.0	.90
11	18	7.5	3.4	3.4	3.4	4.0	9.0	9.8	177	48	1.1	1.0
12	18	7.0	3.4	3.4	3.4	4.0	9.0	5.6	167	50	1.6	1.1
13	19	7.0	3.4	3.4	3.4	4.0	9.0	4.3	179	47	1.3	.90
14	18	7.0	3.4	3.4	3.4	4.0	9.0	6.2	173	.43	1.3	.84
15	20	7.0	3.4	3.4	3.4	4.0	9.0	8.9	175	30	1.3	1.2
16	20	7.0	3.4	3.4	4.0	4.0	11	8.1	173	46	1.2	1.1
17	20	7.0	3.4	3.4	4.0	4.0	12	9.7	169	47	1.3	.84
18	20	7.0	3.4	3.4	4.0	4.0	13	12	156	53	1.5	.78
19	20	7.0	3.4	3.4	4.0	4.0	13	14	145	45	1.5	.78
20	20	7.0	3.4	3.4	4.0	4.0	13	12	141	1.1	1.2	.72
21	20	7.0	3.4	3.4	4.0	4.0	13	16	139	1.5	1.2	.69
22	20	7.0	3.4	3.4	4.0	4.0	13	20	127	21	2.1	9.6
23	20	7.0	3.4	3.4	4.0	5.0	13	7.5	116	.97	1.1	15
24	20	7.0	3.4	3.4	4.0	5.0	13	15	114	.86	1.1	14
25	20	7.0	3.4	3.4	4.0	5.8	13	30	117	.75	1.0	14
26	17	7.0	3.4	3.4	4.0	7.0	13	31	102	1.1	1.0	16
27	16	7.0	3.4	3.4	4.0	8.0	13	34	92	.99	1.1	12
28	15	7.0	3.4	3.4	4.0	9.0	13	37	81	.89	1.2	2.6
29	13	7.0	3.4	3.4	---	9.0	12	26	74	22	1.0	1.3
30	12	7.0	3.4	3.4	---	9.0	3.2	76	68	19	.96	12
31	10	---	3.4	3.4	---	9.0	---	74	---	.97	.90	---
TOTAL	505.0	234.0	119.6	105.4	103.0	154.8	316.2	530.8	4089	628.57	57.90	117.77
MEAN	16.3	7.80	3.86	3.40	3.68	4.99	10.5	17.1	136	20.3	1.87	3.93
MAX	21	9.5	7.0	3.4	4.0	9.0	13	76	218	55	13	16
MIN	3.0	7.0	3.4	3.4	3.4	4.0	3.2	2.5	68	.29	.90	.69
AC-FT	1000	464	237	209	204	307	627	1050	8110	1250	115	234

CAL YR 1984 TOTAL 14754.96 MEAN 40.3 MAX 271 MIN .70 AC-FT 29270
WTR YR 1985 TOTAL 6962.04 MEAN 19.1 MAX 218 MIN .29 AC-FT 13810

NOTE.--NO GAGE-HEIGHT RECORD OCT. 18 TO APR. 29.

09035700 WILLIAMS FORK ABOVE DARLING CREEK, NEAR LEAL, CO

LOCATION.--Lat 39°47'22", long 106°01'18", in NW¼SW¼ sec.16, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 1.0 mi upstream from Darling Creek and 1.9 mi southeast of Leal.

DRAINAGE AREA.--34.7 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,970 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1972, May 6, 1981 to Jan. 31, 1983, at site 0.6 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 16 to Apr. 6. Records fair except for estimated daily discharges, which are poor. Transmountain diversion above station through August P. Gumlick Tunnel (station 09036000). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 38.1 ft³/s; 27,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 677 ft³/s, June 24, 1971, gage height, 7.12 ft, site and datum then in use, from rating curve extended above 430 ft³/s; minimum daily, 2.7 ft³/s, Apr. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 404 ft³/s at 2000 June 8, gage height, 5.29 ft; minimum daily, 6.7 ft³/s, Mar. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	17	12	8.8	7.5	7.0	8.4	30	160	95	28	9.8
2	23	18	12	8.6	7.4	7.0	8.4	36	172	55	30	10
3	22	17	12	8.6	7.3	7.0	8.4	42	182	41	21	10
4	24	20	12	8.6	7.2	7.0	8.4	48	191	38	19	15
5	33	21	12	8.6	7.0	7.0	8.4	52	215	37	19	13
6	38	17	12	8.6	7.0	7.0	8.4	52	249	34	19	9.8
7	36	20	12	8.6	7.0	7.0	8.8	52	299	32	18	9.9
8	34	16	12	8.6	7.0	7.0	11	61	344	53	18	9.9
9	34	16	12	8.6	7.0	7.0	10	62	353	85	17	9.3
10	33	17	12	8.4	7.0	7.0	11	65	332	80	17	9.2
11	33	16	11	8.4	7.0	6.9	12	65	298	75	17	9.4
12	33	15	10	8.4	7.0	6.8	11	56	280	75	19	10
13	34	15	10	8.4	7.0	6.8	13	51	278	78	17	9.3
14	33	15	10	8.4	7.0	6.7	15	51	283	29	17	8.9
15	33	15	10	8.0	7.0	7.0	18	52	283	46	16	10
16	34	14	10	8.0	7.0	7.0	20	52	282	60	16	10
17	37	14	10	8.0	7.0	7.0	21	53	276	58	15	9.2
18	36	14	9.8	8.0	7.0	7.0	26	56	261	62	15	9.2
19	36	14	9.8	8.0	7.0	7.0	26	58	242	64	15	9.2
20	28	14	9.8	8.0	7.0	7.0	21	55	232	35	14	9.2
21	18	14	9.8	7.8	7.0	7.0	17	62	227	40	14	9.2
22	16	14	9.8	7.8	7.0	7.0	16	67	212	45	14	13
23	18	14	9.8	7.7	7.0	7.0	15	52	198	32	13	18
24	18	14	9.8	7.6	7.0	7.0	16	67	185	30	12	18
25	18	14	9.8	7.6	7.0	7.6	15	87	195	27	11	18
26	17	13	9.8	7.6	7.0	7.6	15	92	181	27	10	18
27	15	13	9.2	7.6	7.0	7.6	21	105	159	26	9.9	19
28	13	12	9.0	7.6	7.0	7.6	26	124	138	26	10	14
29	12	12	9.0	7.6	---	7.6	29	123	124	37	9.7	12
30	16	12	9.0	7.6	---	7.6	26	191	112	35	9.4	14
31	17	---	9.0	7.6	---	7.6	---	174	---	23	9.5	---
TOTAL	813	457	324.4	251.7	197.4	220.4	470.2	2193	6943	1480	489.5	353.5
MEAN	26.2	15.2	10.5	8.12	7.05	7.11	15.7	70.7	231	47.7	15.8	11.8
MAX	38	21	12	8.8	7.5	7.6	29	191	353	95	30	19
MIN	12	12	9.0	7.6	7.0	6.7	8.4	30	112	23	9.4	8.9
AC-FT	1610	906	643	499	392	437	933	4350	13770	2940	971	701

CAL YR 1984 TOTAL 26662.4 MEAN 72.8 MAX 452 MIN 5.0 AC-FT 52880
WTR YR 1985 TOTAL 14193.1 MEAN 38.9 MAX 353 MIN 6.7 AC-FT 28150

NOTE.--NO GAGE-HEIGHT RECORD NOV. 16 TO MAR. 14.

09035800 DARLING CREEK NEAR LEAL, CO

LOCATION.--Lat 39°48'20", long 106°01'05", in NE¼SW¼ sec.9, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 0.6 mi upstream from mouth and 1.4 mi southeast of Leal.

DRAINAGE AREA.--8.21 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,090 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 26 to May 21, Sept. 18-30. Records good except for period of estimated daily discharge, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 9.89 ft³/s; 7,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 241 ft³/s, June 30, 1984, gage height, 4.30 ft, from rating curve extended above 100 ft³/s; minimum daily, 1.0 ft³/s, Jan. 12, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 164 ft³/s at 2000 June 8, gage height, 4.00 ft; minimum daily, 2.6 ft³/s, Mar. 11-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	6.5	4.8	3.1	3.0	3.0	3.8	8.0	42	25	8.6	3.9
2	8.5	6.4	4.7	3.0	3.0	3.0	3.7	8.6	45	23	8.8	4.5
3	9.0	6.4	4.6	3.0	3.0	3.0	3.8	11	47	22	6.8	3.9
4	9.5	5.9	4.8	3.0	3.0	3.1	4.0	12	47	20	6.1	5.7
5	10	6.0	4.8	3.0	3.0	3.0	4.2	13	52	18	5.8	4.1
6	9.3	6.0	4.8	3.0	3.0	2.9	4.5	14	61	16	5.7	3.8
7	8.8	5.9	4.7	3.0	3.0	2.8	4.7	15	76	15	5.5	4.1
8	8.5	5.9	4.5	3.0	3.0	2.7	5.0	16	104	14	5.3	4.1
9	8.5	5.8	4.5	3.0	3.0	2.7	5.3	17	102	13	5.2	3.8
10	8.4	5.7	4.5	3.0	3.0	2.7	5.7	18	86	12	5.1	3.6
11	8.4	5.7	4.6	3.0	3.0	2.6	6.0	18	72	12	5.2	3.7
12	8.4	5.6	4.6	3.0	3.0	2.6	6.9	16	68	11	6.6	4.0
13	8.4	5.6	4.5	3.0	3.0	2.6	7.0	15	67	11	6.0	3.6
14	8.2	5.6	4.3	3.0	3.0	2.6	7.2	14	65	9.1	5.7	3.7
15	7.7	5.5	4.5	3.0	3.0	2.6	7.9	14	64	8.7	5.3	4.2
16	7.5	5.4	4.4	3.0	3.0	2.6	8.5	14	62	7.9	5.2	3.9
17	7.8	5.3	4.3	3.0	3.0	2.6	9.3	15	59	7.8	5.1	3.7
18	7.7	5.4	4.2	3.0	3.0	2.7	10	16	55	9.6	5.1	3.7
19	7.0	5.3	4.2	3.0	3.0	2.7	9.0	16	50	12	4.9	3.8
20	7.7	5.1	4.2	3.0	3.0	2.8	8.0	17	46	15	4.6	3.9
21	7.5	5.3	4.2	3.0	3.0	2.8	7.0	18	44	20	4.5	4.0
22	7.5	5.3	4.2	3.0	3.0	2.8	6.2	20	40	15	4.7	4.5
23	7.3	5.2	4.2	3.0	3.0	2.8	5.4	22	38	14	4.4	6.0
24	7.0	5.2	4.2	3.0	3.0	2.8	5.0	27	36	13	4.2	6.2
25	6.6	5.1	4.2	3.0	3.0	2.8	4.6	30	37	11	4.0	6.2
26	6.8	5.0	4.1	3.0	3.0	2.9	4.6	34	36	11	3.8	6.2
27	7.0	4.9	4.0	3.0	3.0	3.0	5.0	38	35	10	3.8	6.0
28	6.8	5.0	3.9	3.0	3.0	3.3	5.6	46	32	9.3	3.8	5.4
29	6.7	4.9	3.8	3.0	---	3.6	6.0	51	29	9.9	3.5	4.8
30	6.6	4.8	3.5	3.0	---	3.9	7.0	51	27	8.3	3.4	5.0
31	6.6	---	3.3	3.0	---	3.8	---	47	---	7.3	3.4	---
TOTAL	243.7	165.7	134.1	93.1	84.0	89.8	180.9	671.6	1624	410.9	160.1	134.0
MEAN	7.86	5.52	4.33	3.00	3.00	2.90	6.03	21.7	54.1	13.3	5.16	4.47
MAX	10	6.5	4.8	3.1	3.0	3.9	10	51	104	25	8.8	6.2
MIN	6.6	4.8	3.3	3.0	3.0	2.6	3.7	8.0	27	7.3	3.4	3.6
AC-FT	483	329	266	185	167	178	359	1330	3220	815	318	266

CAL YR 1984 TOTAL 6509.4 MEAN 17.8 MAX 136 MIN 1.9 AC-FT 12910
WTR YR 1985 TOTAL 3991.9 MEAN 10.9 MAX 104 MIN 2.6 AC-FT 7920

NOTE.--NO GAGE-HEIGHT RECORD NOV. 26 TO MAY 21.

09035820 SOUTH FORK OF WILLIAMS FORK AT UPPER STATION NEAR PTARMIGAN PASS, CO

LOCATION.--Lat 39°42'30", long 105°56'49", in Grand County, Hydrologic Unit 14010001, on left bank 3.5 mi upstream from Short Creek, 3.4 mi northeast of Ptarmigan Pass.

DRAINAGE AREA.--2.78 mi².

PERIOD OF RECORD.--October 1984 to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 10,820 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-11, 15-18, 23-28, Oct. 30 to Nov. 5, 7-10, 14-16, 20-24, 26-27, Dec. 4 to Apr. 24, Sept. 22-23, 26-30. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperatures were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 77 ft³/s, June 8, 1985, gage height 1.36 ft; minimum daily 0.49 ft³/s, Feb. 12 to Apr. 4, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 77 ft³/s at 1700 June 8, gage height 1.36 ft; minimum daily 0.49 ft³/s, Feb. 12 to Apr. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	3.1	1.7	.64	.52	.49	1.2	1.2	16	15	5.5	1.8
2	4.4	3.0	1.7	.64	.52	.49	1.2	2.4	19	15	5.7	1.9
3	4.4	2.9	1.7	.64	.52	.49	1.2	1.1	20	15	5.2	1.9
4	4.4	2.9	1.6	.62	.52	.49	1.2	1.1	22	15	4.9	2.1
5	4.4	2.8	1.6	.60	.52	.49	1.2	1.6	26	15	4.6	1.8
6	4.4	2.7	1.5	.60	.52	.49	1.2	1.3	32	14	4.3	1.6
7	4.4	2.7	1.5	.60	.52	.49	1.2	2.0	42	14	4.0	1.6
8	4.4	2.6	1.4	.60	.52	.49	1.2	3.8	50	13	3.8	1.5
9	4.4	2.5	1.4	.60	.52	.49	1.2	6.9	47	13	3.9	1.4
10	4.4	2.4	1.3	.60	.52	.49	1.2	9.6	41	12	3.6	1.3
11	4.4	2.4	1.3	.60	.50	.49	1.2	11	38	12	3.7	1.5
12	4.2	2.3	1.2	.60	.49	.49	1.2	8.9	40	12	4.0	1.5
13	4.9	2.2	1.2	.60	.49	.49	1.3	8.0	41	11	3.4	1.4
14	4.8	2.2	1.2	.58	.49	.49	1.3	7.6	41	10	3.2	1.3
15	4.8	2.2	1.1	.56	.49	.49	1.3	7.3	43	9.7	3.0	1.5
16	4.6	2.2	1.1	.56	.49	.49	1.1	6.9	43	8.4	2.9	1.3
17	4.3	2.2	1.1	.56	.49	.49	1.2	6.4	43	7.3	2.7	1.2
18	4.1	2.2	1.0	.56	.49	.49	1.2	6.5	41	8.0	2.7	1.3
19	3.9	2.1	.94	.56	.49	.49	1.2	6.7	40	9.1	2.5	1.2
20	3.8	2.1	.90	.56	.49	.49	1.2	6.7	38	9.9	2.3	1.2
21	3.8	2.0	.86	.56	.49	.49	1.2	6.5	37	10	2.2	1.2
22	3.7	2.0	.82	.56	.49	.49	1.2	6.6	33	9.1	2.1	1.2
23	3.7	1.9	.80	.56	.49	.49	1.2	9.1	30	8.8	2.0	1.3
24	3.7	1.9	.78	.54	.49	.49	1.2	13	28	8.2	2.0	1.3
25	3.6	1.9	.72	.52	.49	.49	1.1	16	28	7.5	1.9	1.4
26	3.5	1.8	.70	.52	.49	.49	1.1	15	24	8.2	1.8	1.5
27	3.5	1.8	.70	.52	.49	.49	1.1	16	20	7.4	1.9	1.6
28	3.4	1.8	.70	.52	.49	.49	1.1	17	18	6.9	1.8	1.6
29	3.3	1.8	.70	.52	---	.49	1.1	19	17	6.8	1.7	1.6
30	3.2	1.8	.70	.52	---	.49	1.1	19	16	6.3	1.6	1.6
31	3.2	---	.66	.52	---	.49	---	16	---	5.8	1.6	---
TOTAL	126.4	68.4	34.58	17.74	14.03	15.19	35.6	260.2	974	323.4	96.5	44.6
MEAN	4.08	2.28	1.12	.57	.50	.49	1.19	8.39	32.5	10.4	3.11	1.49
MAX	4.9	3.1	1.7	.64	.52	.49	1.3	19	50	15	5.7	2.1
MIN	3.2	1.8	.66	.52	.49	.49	1.1	1.1	16	5.8	1.6	1.2
AC-FT	251	136	69	35	28	30	71	516	1930	641	191	88

WTR YR 1985 TOTAL 2010.64 MEAN 5.51 MAX 50 MIN .49 AC-FT 3990

NOTE.--NO GAGE-HEIGHT RECORD DEC. 4 TO APR. 24.

09035830 SOUTH FORK OF WILLIAMS FORK NEAR PTARMIGAN PASS, CO.

LOCATION.--Lat 39°42'15", long 105°57'43", in Grand County, Hydrologic Unit 14010001, on right bank 2.6 mi upstream from Short Creek, 2.5 mi northeast of Ptarmigan Pass.

DRAINAGE AREA.--4.01 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to September 1985.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 10,590 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharge: Oct. 1-13, Oct. 15-18, 23-27, Oct. 31 to Nov. 2, Nov. 4-7, 15-17, Dec. 5 to June 4, Sept. 22-23, 26, 28-30. Records good except for estimated daily discharges, which are poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 192 ft^3/s, June 8, 1985, gage height, 2.82 ft; minimum daily, 0.68 ft^3/s, Feb. 14 to Apr. 3, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 192 ft^3/s at 1630 June 8, gage height, 2.82 ft; minimum daily, 0.68 ft^3/s, Feb. 14 to Apr. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	3.1	1.9	1.3	.80	.68	.68	2.5	22	17	7.2	2.9
2	6.2	3.0	1.8	1.3	.80	.68	.68	3.0	24	16	7.5	3.0
3	6.4	2.9	1.8	1.3	.80	.68	.68	3.4	26	16	6.7	3.0
4	6.6	2.8	1.8	1.3	.80	.68	.70	4.0	28	15	6.4	3.4
5	7.2	2.7	1.8	1.3	.80	.68	.76	4.7	48	15	5.9	3.0
6	7.2	2.6	1.8	1.3	.80	.68	.80	5.0	66	14	5.7	2.7
7	7.0	2.5	1.8	1.3	.80	.68	.85	5.0	96	14	5.4	2.9
8	6.8	2.4	1.8	1.3	.80	.68	.90	5.0	120	13	5.2	2.8
9	6.4	2.4	1.8	1.2	.80	.68	.97	5.0	89	14	5.2	2.6
10	6.3	2.5	1.8	1.2	.80	.68	1.1	4.9	64	13	4.9	2.6
11	6.2	2.4	1.8	1.2	.80	.68	1.2	4.8	49	12	5.0	2.6
12	6.0	2.3	1.8	1.2	.78	.68	1.4	4.7	49	12	5.3	2.7
13	6.1	2.3	1.7	1.2	.71	.68	1.6	4.4	56	12	4.5	2.5
14	5.6	2.3	1.6	.90	.68	.68	1.7	4.4	57	10	4.2	2.4
15	5.4	2.3	1.6	.80	.68	.68	1.9	4.9	58	9.9	3.9	2.7
16	5.3	2.2	1.6	.80	.68	.68	2.1	5.4	57	9.5	3.8	2.6
17	5.2	2.2	1.6	.80	.68	.68	2.3	5.8	53	8.9	3.7	2.4
18	5.0	2.1	1.6	.80	.68	.68	2.3	6.1	46	10	3.7	2.5
19	4.8	2.1	1.5	.80	.68	.68	2.3	6.2	44	12	3.6	2.5
20	4.7	2.1	1.5	.80	.68	.68	2.3	6.0	42	13	3.4	2.4
21	4.5	2.1	1.5	.80	.68	.68	2.2	7.6	42	14	3.3	2.4
22	4.4	2.0	1.5	.80	.68	.68	2.1	8.8	37	12	3.3	2.5
23	4.2	2.0	1.4	.80	.68	.68	2.1	10	32	12	3.1	2.5
24	4.0	2.0	1.4	.80	.68	.68	2.0	12	30	11	3.0	2.6
25	3.9	2.0	1.4	.80	.68	.68	2.0	14	31	9.7	3.0	2.6
26	3.8	2.0	1.4	.80	.68	.68	2.0	16	27	11	2.9	2.7
27	3.7	1.9	1.4	.80	.68	.68	1.9	18	22	9.9	2.9	2.8
28	3.6	1.9	1.3	.80	.68	.68	2.0	20	20	8.9	3.0	2.9
29	3.4	1.9	1.3	.80	---	.68	2.1	22	19	8.7	2.8	2.9
30	3.3	1.9	1.3	.80	---	.68	2.3	21	17	8.1	2.7	2.9
31	3.2	---	1.3	.80	---	.68	---	20	---	7.5	2.7	---
TOTAL	162.5	68.9	49.6	30.90	20.49	21.08	47.92	264.6	1371	369.1	133.9	81.0
MEAN	5.24	2.30	1.60	1.00	.73	.68	1.60	8.54	45.7	11.9	4.32	2.70
MAX	7.2	3.1	1.9	1.3	.80	.68	2.3	22	120	17	7.5	3.4
MIN	3.2	1.9	1.3	.80	.68	.68	.68	2.5	17	7.5	2.7	2.4
AC-FT	322	137	98	61	41	42	95	525	2720	732	266	161

WTR YR 1985 TOTAL 2620.99 MEAN 7.18 MAX 120 MIN .68 AC-FT 5200

09035830 SOUTH FORK OF WILLIAMS FORK NEAR PTARMIGAN PASS, CO--Continued

PERIOD OF RECORD.--October 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT												
30...	10:20	65	7.8	7.0	9.4	9.2	1.5	1.4	0.4	23	6.0	0.4
APR												
30...	12:00	57	7.9	1.5	9.9	8.7	1.5	1.0	0.7	22	5.6	0.3
JUN												
04...	11:00	50	7.9	5.0	8.9	7.2	1.1	0.8	0.5	19	5.7	0.2
AUG												
13...	09:30	67	8.0	5.0	7.4	9.6	1.6	1.1	0.4	24	5.9	0.4

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
OCT												
30...	0.3	5.0	44	38	<0.01	0.27	--	0.2	0.01	<0.01	<0.01	<0.01
APR												
30...	0.2	5.0	34	36	0.04	0.24	--	0.4	0.05	<0.01	0.01	<0.05
JUN												
04...	0.2	4.4	32	32	0.04	0.40	1.0	0.6	0.05	<0.01	<0.01	<0.01
AUG												
13...	0.3	4.7	38	39	0.03	0.21	0.41	0.2	0.04	<0.01	<0.01	0.01

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
OCT										
30...	10:20	80	<1	64	<10	1	3	2	11	43
APR										
30...	12:00	30	<1	17	<10	1	<1	<1	1	30
JUN										
04...	11:00	30	<1	21	<10	<1	<1	<1	2	23
AUG										
13...	09:30	10	<1	23	<10	<1	<1	<1	1	17

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
OCT									
30...	2	<4	4	<0.1	1	<1	<1	<1	20
APR									
30...	1	<4	4	--	<1	<1	<1	<1	4
JUN									
04...	3	<4	3	<0.1	<1	3	<1	<1	8
AUG									
13...	<1	<4	4	<0.1	<1	2	<1	<1	<3

09035840 SOUTH FORK OF WILLIAMS FORK ABOVE TRIBUTARY NEAR PTARMIGAN PASS, CO

LOCATION.--Lat 39°42'13", long 105°58'54", in Grand County, Hydrologic Unit 14010001, on right bank, 1.5 mi upstream from Short Creek, 1.7 mi northeast of Ptarmigan Pass.

DRAINAGE AREA.--5.53 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 10,360 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-10, 15-21, 23-28, Oct. 30 to Apr. 12, Apr. 22-23, Apr. 27 to May 3, May 14, 20, Sept. 17, 22-23, 25-30. Records, good except for estimated daily discharges, which are poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 182 ft^3/s, June 8, 1985, gage height, 2.17 ft; maximum gage height, 2.56 ft, May 1, 1985 (backwater from ice); minimum daily discharge, 1.2 ft^3/s, Feb. 13 to Apr. 4, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 182 ft^3/s at 1700 June 8, gage height, 2.17 ft; maximum gage height, 2.56 ft, May 1, 1985 (backwater from ice); minimum daily discharge, 1.2 ft^3/s, Feb 13 to Apr. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	5.0	3.0	2.0	1.4	1.2	1.2	4.7	34	18	9.5	3.8
2	7.7	5.0	2.9	2.0	1.4	1.2	1.2	7.0	39	18	9.8	3.8
3	7.7	5.0	2.8	2.0	1.4	1.2	1.2	10	42	17	8.9	4.0
4	7.7	5.0	2.8	2.0	1.4	1.2	1.2	13	47	16	8.4	4.4
5	7.7	5.0	2.8	1.9	1.4	1.2	1.3	13	59	16	8.0	4.0
6	7.7	5.0	2.8	1.8	1.4	1.2	1.4	12	74	16	7.7	3.8
7	7.7	5.0	2.8	1.8	1.4	1.2	1.5	12	91	15	7.3	3.8
8	7.7	4.7	2.8	1.8	1.4	1.2	1.6	15	107	15	7.0	3.8
9	7.7	4.4	2.8	1.7	1.4	1.2	1.7	17	90	15	6.9	3.8
10	7.7	4.4	2.8	1.7	1.4	1.2	1.8	17	74	15	6.5	3.7
11	7.3	4.4	2.8	1.6	1.4	1.2	1.9	17	61	14	6.6	3.8
12	7.1	4.4	2.8	1.6	1.3	1.2	2.1	14	58	14	7.2	3.8
13	7.5	4.2	2.8	1.5	1.2	1.2	2.4	12	62	14	6.1	3.7
14	7.5	4.1	2.8	1.4	1.2	1.2	3.1	11	64	13	5.8	3.7
15	7.4	4.1	2.8	1.4	1.2	1.2	5.2	11	65	12	5.4	3.9
16	7.4	4.1	2.8	1.4	1.2	1.2	5.4	9.4	62	12	5.2	3.7
17	7.4	4.0	2.8	1.4	1.2	1.2	5.9	10	60	11	5.0	3.7
18	6.9	4.0	2.8	1.4	1.2	1.2	6.2	12	53	12	5.1	3.7
19	6.9	3.8	2.6	1.4	1.2	1.2	6.2	12	46	14	4.9	3.7
20	6.2	3.7	2.6	1.4	1.2	1.2	5.9	12	43	15	4.6	3.7
21	6.2	3.6	2.6	1.4	1.2	1.2	4.0	12	42	15	4.5	3.7
22	6.2	3.6	2.6	1.4	1.2	1.2	3.3	13	37	13	4.4	3.8
23	6.2	3.5	2.5	1.4	1.2	1.2	3.0	17	32	13	4.2	3.8
24	6.2	3.5	2.4	1.4	1.2	1.2	2.8	22	30	13	4.1	3.8
25	6.0	3.5	2.4	1.4	1.2	1.2	2.8	25	30	12	4.1	3.8
26	5.8	3.4	2.4	1.4	1.2	1.2	3.0	25	26	12	4.0	4.0
27	5.6	3.4	2.4	1.4	1.2	1.2	3.1	31	23	11	4.0	4.0
28	5.4	3.3	2.2	1.4	1.2	1.2	3.3	42	21	11	3.8	4.0
29	5.2	3.2	2.1	1.4	---	1.2	3.4	48	20	10	3.8	4.0
30	5.0	3.1	2.0	1.4	---	1.2	3.6	44	19	9.9	3.7	4.0
31	5.0	---	2.0	1.4	---	1.2	---	36	---	9.6	3.7	---
TOTAL	211.4	123.4	81.5	48.6	35.9	37.2	90.7	556.1	1511	421.5	180.2	115.2
MEAN	6.82	4.11	2.63	1.57	1.28	1.20	3.02	17.9	50.4	13.6	5.81	3.84
MAX	7.7	5.0	3.0	2.0	1.4	1.2	6.2	48	107	18	9.8	4.4
MIN	5.0	3.1	2.0	1.4	1.2	1.2	1.2	4.7	19	9.6	3.7	3.7
AC-FT	419	245	162	96	71	74	180	1100	3000	836	357	228

WTR YR 1985 TOTAL 3412.7 MEAN 9.35 MAX 107 MIN 1.2 AC-FT 6770

09035840 SOUTH FORK OF WILLIAMS FORK ABOVE TRIB NEAR PTARMIGAN PASS, CO--Continued

PERIOD OF RECORD.--October 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT												
30...	12:20	70	7.7	2.0	9.3	10	2.0	1.3	0.3	27	7.1	0.3
APR												
30...	10:00	68	7.9	1.0	9.7	9.8	2.1	1.3	0.9	28	6.7	0.3
JUN												
04...	09:35	56	7.8	4.5	8.7	7.9	1.4	0.9	0.5	19	5.1	0.2
AUG												
13...	13:00	75	7.1	11.0	7.2	10	2.1	1.2	0.5	29	6.8	0.3

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT												
30...	0.3	5.6	50	43	<0.01	0.26	--	0.3	0.01	<0.01	<0.01	0.03
APR												
30...	0.3	5.9	46	44	0.04	0.17	--	0.5	0.05	<0.01	0.01	<0.05
JUN												
04...	0.2	4.8	37	33	0.04	0.31	0.71	0.4	0.05	<0.01	<0.01	<0.01
AUG												
13...	0.3	5.3	47	44	0.03	0.18	--	<0.2	0.04	<0.01	<0.01	0.01

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT										
30...	12:20	50	<1	46	<10	<1	2	1	<1	55
APR										
30...	10:00	30	<1	26	<10	<1	<1	<1	1	54
JUN										
04...	09:35	30	<1	21	<10	<1	<1	<1	1	24
AUG										
13...	13:00	20	<1	26	<10	<1	<1	<1	1	100

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT									
30...	2	<4	7	<0.1	1	<1	<1	1	18
APR									
30...	<1	<4	5	--	1	<1	<1	<1	9
JUN									
04...	2	<4	3	<0.1	2	<1	<1	<1	5
AUG									
13...	<1	<4	5	<0.1	<1	1	<1	<1	3

09035845 SOUTH FORK OF WILLIAMS FORK TRIBUTARY NEAR PTARMIGAN PASS, CO

LOCATION.--Lat 39°42'10", long 105°59'06", Grand County, Hydrologic Unit 14010001, on right bank 1.3 mi upstream from Short Creek, 1.5 mi northeast of Ptarmigan Pass.

DRAINAGE AREA.--0.60 mi^2.

PERIOD OF RECORD.--October 1984 to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 10,240 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-11, Dec. 4 to Apr. 30. Records good except for estimated daily discharges, which are poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.7 ft^3/s at 1930 June 8, gage height 1.97 ft; minimum daily, 0.04 ft^3/s May 15-16.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5.7 ft^3/s at 1930 June 8, gage height 1.97 ft; minimum daily, 0.04 ft^3/s, May 15-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.11	.08	.08	.07	.05	.05	.08	.63	.23	.09	.08
2	.16	.11	.08	.08	.07	.05	.05	.08	.79	.22	.09	.08
3	.16	.11	.08	.08	.07	.05	.05	.09	.87	.19	.11	.08
4	.16	.11	.08	.08	.07	.05	.05	.09	1.0	.18	.11	.09
5	.16	.11	.08	.08	.07	.05	.05	.09	1.4	.17	.11	.09
6	.15	.11	.08	.08	.07	.05	.05	.09	2.2	.16	.10	.08
7	.14	.11	.08	.08	.07	.05	.05	.09	3.1	.13	.09	.08
8	.14	.11	.08	.07	.06	.05	.05	.09	3.9	.12	.09	.08
9	.14	.11	.08	.07	.06	.05	.05	.09	3.9	.13	.09	.08
10	.14	.11	.08	.07	.06	.05	.05	.10	3.4	.11	.11	.08
11	.14	.11	.08	.07	.05	.05	.05	.10	2.7	.09	.11	.08
12	.14	.11	.08	.07	.05	.05	.05	.07	2.5	.10	.11	.07
13	.14	.11	.08	.07	.05	.05	.05	.06	2.7	.10	.11	.07
14	.14	.10	.08	.07	.05	.05	.05	.05	2.8	.09	.11	.07
15	.14	.09	.08	.07	.05	.05	.05	.04	2.9	.08	.11	.07
16	.14	.09	.08	.07	.05	.05	.05	.04	2.9	.07	.10	.07
17	.14	.09	.08	.07	.05	.05	.05	.05	2.7	.07	.09	.07
18	.14	.09	.08	.07	.05	.05	.05	.07	2.3	.09	.10	.07
19	.12	.09	.08	.07	.05	.05	.05	.06	2.0	.10	.11	.07
20	.12	.09	.08	.07	.05	.05	.05	.06	1.7	.13	.10	.07
21	.12	.09	.08	.07	.05	.05	.05	.06	1.6	.14	.09	.07
22	.12	.09	.08	.07	.05	.05	.05	.06	1.2	.11	.09	.08
23	.12	.09	.08	.07	.05	.05	.05	.09	.96	.10	.08	.08
24	.12	.09	.08	.07	.05	.05	.05	.33	.86	.10	.08	.08
25	.12	.09	.08	.07	.05	.05	.05	.43	.86	.09	.08	.08
26	.12	.09	.08	.07	.05	.05	.05	.45	.66	.10	.08	.08
27	.12	.09	.08	.07	.05	.05	.05	.78	.49	.11	.08	.08
28	.12	.08	.08	.07	.05	.05	.05	1.3	.39	.11	.08	.08
29	.12	.08	.08	.07	---	.05	.05	1.3	.32	.10	.08	.08
30	.12	.08	.08	.07	---	.05	.05	1.1	.27	.09	.08	.08
31	.12	---	.08	.07	---	.05	---	.79	---	.09	.08	---
TOTAL	4.19	2.94	2.48	2.24	1.57	1.55	1.50	8.18	54.00	3.70	2.94	2.32
MEAN	.14	.10	.08	.07	.06	.05	.05	.26	1.80	.12	.09	.08
MAX	.16	.11	.08	.08	.07	.05	.05	1.3	3.9	.23	.11	.09
MIN	.12	.08	.08	.07	.05	.05	.05	.04	.27	.07	.08	.07
AC-FT	8.3	5.8	4.9	4.4	3.1	3.1	3.0	16	107	7.3	5.8	4.6

WTR YR 1985 TOTAL 87.61 MEAN .24 MAX 3.9 MIN .04 AC-FT 174

09035850 SOUTH FORK OF WILLIAMS FORK ABOVE SHORT CREEK NEAR PTARMIGAN PASS, CO

LOCATION.--Lat 39°42'11", long 105°59'23", in Grand County, Hydrologic Unit 14010001 on right bank 1.1 mi northeast of Ptarmigan Pass.

DRAINAGE AREA.--6.53 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 10,210 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-9, 15-21, 23-28, Oct. 31 to Nov. 5, Nov. 7 to Apr. 14, Apr. 22-23, 27-28. Records good except estimated daily discharges, which are poor. No diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 164 ft^3/s, June 8, 1985, gage height, 2.91 ft; minimum daily, 2.3 ft^3/s, Feb 11 to Apr. 2, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 164 ft^3/s at 1930 June 8, gage height 2.91 ft; minimum daily, 2.3 ft^3/s, Feb. 11 to Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.4	3.4	3.4	2.6	2.3	2.3	11	34	23	9.9	3.9
2	10	7.4	3.4	3.4	2.6	2.3	2.3	15	38	22	10	4.1
3	11	7.4	3.4	3.4	2.6	2.3	2.4	19	41	21	8.9	4.2
4	11	7.4	3.4	3.4	2.6	2.3	2.5	20	45	21	8.4	4.5
5	11	7.2	3.4	3.3	2.6	2.3	2.6	20	52	20	7.9	4.1
6	10	7.0	3.4	3.3	2.6	2.3	2.7	18	65	19	7.5	3.8
7	10	6.6	3.4	3.2	2.6	2.3	2.9	18	87	19	7.1	3.8
8	9.8	6.2	3.4	3.1	2.6	2.3	3.0	24	110	18	6.8	3.8
9	9.2	5.8	3.4	3.1	2.6	2.3	3.3	21	106	19	6.6	3.6
10	8.8	5.4	3.4	3.0	2.4	2.3	3.7	23	87	18	6.2	3.5
11	8.8	5.2	3.4	2.9	2.3	2.3	4.0	23	73	16	6.2	3.7
12	8.8	5.0	3.4	2.8	2.3	2.3	4.4	17	69	16	6.6	3.8
13	8.8	4.7	3.4	2.8	2.3	2.3	4.8	15	73	16	5.7	3.5
14	8.6	4.4	3.4	2.7	2.3	2.3	5.2	14	76	15	5.6	3.4
15	8.5	4.2	3.4	2.6	2.3	2.3	5.6	13	76	14	5.3	3.7
16	8.4	4.0	3.4	2.6	2.3	2.3	6.7	13	75	14	5.2	3.6
17	8.4	3.9	3.4	2.6	2.3	2.3	8.8	13	72	14	5.1	3.4
18	8.3	3.8	3.4	2.6	2.3	2.3	9.9	15	66	16	5.1	3.4
19	8.2	3.6	3.4	2.6	2.3	2.3	8.5	14	61	17	5.0	3.5
20	8.2	3.4	3.4	2.6	2.3	2.3	9.9	14	58	19	4.7	3.3
21	8.1	3.4	3.4	2.6	2.3	2.3	5.8	14	57	22	4.6	3.3
22	8.1	3.4	3.4	2.6	2.3	2.3	7.2	14	51	16	4.6	3.7
23	8.0	3.4	3.4	2.6	2.3	2.3	6.3	18	46	16	4.3	3.7
24	8.0	3.4	3.4	2.6	2.3	2.3	5.7	25	43	15	4.2	3.5
25	7.9	3.4	3.4	2.6	2.3	2.3	5.8	31	43	13	4.0	3.5
26	7.8	3.4	3.4	2.6	2.3	2.3	5.5	25	38	15	4.0	4.0
27	7.6	3.4	3.4	2.6	2.3	2.3	5.7	31	31	13	4.1	4.0
28	7.5	3.4	3.4	2.6	2.3	2.3	5.9	38	29	12	4.1	3.8
29	7.4	3.4	3.4	2.6	---	2.3	5.9	42	26	12	4.0	3.7
30	7.4	3.4	3.4	2.6	---	2.3	7.3	40	24	11	3.9	4.0
31	7.4	---	3.4	2.6	---	2.3	---	34	---	10	3.8	---
TOTAL	271.0	144.0	105.4	88.0	67.2	71.3	156.6	652	1752	512	179.4	111.8
MEAN	8.74	4.80	3.40	2.84	2.40	2.30	5.22	21.0	58.4	16.5	5.79	3.73
MAX	11	7.4	3.4	3.4	2.6	2.3	9.9	42	110	23	10	4.5
MIN	7.4	3.4	3.4	2.6	2.3	2.3	2.3	11	24	10	3.8	3.3
AC-FT	538	286	209	175	133	141	311	1290	3480	1020	356	222

WTR YR 1985 TOTAL 4110.7 MEAN 11.3 MAX 110 MIN 2.3 AC-FT 8150

09035850 SOUTH FORK OF WILLIAMS FORK ABOVE SHORT CREEK NEAR PTARMIGAN PASS, CO--Continued

PERIOD OF RECORD.--October 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 30...	14:30	78	7.5	2.0	9.2	10	2.1	1.3	0.6	35	6.7	0.2
APR 30...	10:35	70	8.1	2.0	9.4	9.9	2.2	1.2	0.8	28	6.5	0.3
JUN 04...	09:30	57	7.8	4.0	8.7	8.0	1.6	1.0	0.6	19	4.9	<0.2
AUG 13...	11:00	78	7.6	7.0	8.1	11	2.3	1.2	0.5	29	5.7	0.2

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT 30...	0.4	5.6	50	48	<0.01	0.24	--	0.2	0.01	<0.01	<0.01	0.03
APR 30...	0.3	6.0	39	44	0.04	0.16	--	0.6	0.05	<0.01	0.01	<0.05
JUN 04...	0.2	5.0	34	--	0.04	0.28	0.58	0.3	0.05	<0.01	<0.01	<0.01
AUG 13...	0.3	5.4	45	44	0.03	0.17	--	<0.2	0.04	<0.01	<0.01	0.01

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 30...	14:30	10	<1	60	<10	<1	1	<1	<1	69
APR 30...	10:35	30	<1	21	<10	<1	<1	<1	2	95
JUN 04...	09:30	70	<1	22	<10	<1	<1	1	10	28
AUG 13...	11:00	<10	<1	23	<10	<1	<1	<1	1	64

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 30...	<1	<4	7	<0.1	1	<1	<1	<1	32
APR 30...	<1	<4	4	--	1	<1	<1	<1	6
JUN 04...	4	<4	3	<0.1	<1	4	<1	1	8
AUG 13...	<1	<4	7	<0.1	1	1	<1	<1	<3

09035870 SOUTH FORK OF WILLIAMS FORK BELOW SHORT CREEK NEAR PTARMIGAN PASS, CO

LOCATION.--Lat 39°44'57", long 106°01'53", in Grand County, Hydrologic Unit 14010001 on left bank 3.25 mi downstream from Short Creek, 4.5 mi northwest of Ptarmigan Pass.

DRAINAGE AREA.--20.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 9,360 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-3, 16-21, 23-28, Nov. 2, 4-21, Dec. 21 to Feb. 4, Feb. 18-19, 24, 27, Mar. 2, 4, 8, 14-17, 21-23, 28, 30. Records good except for estimated daily discharges, which are poor. No diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 302 ft^3/s, June 8, 1985, gage height, 2.51 ft; minimum daily, 5.1 ft^3/s, Apr. 7, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 302 ft^3/s at 1900 June 8, gage height, 2.51 ft; minimum daily, 5.1 ft^3/s, Apr. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	16	11	9.0	6.2	5.9	5.3	23	95	64	31	12
2	19	16	11	9.0	6.2	5.8	5.3	34	104	61	33	13
3	19	15	11	8.8	6.2	5.8	5.3	46	111	59	30	13
4	21	15	11	8.3	6.2	5.8	5.3	51	120	57	29	16
5	25	14	11	8.0	6.2	5.9	5.4	51	138	54	28	14
6	25	14	11	8.0	6.1	5.8	5.3	50	174	52	27	12
7	24	14	10	8.0	6.1	5.8	5.1	50	211	50	26	12
8	22	14	10	8.0	6.0	5.8	5.3	58	247	48	25	12
9	22	14	10	8.0	6.1	5.8	5.3	59	220	47	24	11
10	22	14	10	8.0	6.1	5.8	5.4	64	206	44	24	11
11	21	14	10	8.0	6.1	5.8	5.7	60	188	42	24	11
12	22	14	10	8.0	6.1	5.8	5.8	50	171	41	27	13
13	22	14	10	8.0	6.0	5.8	7.4	43	178	42	23	11
14	22	13	10	7.2	6.0	5.8	8.5	40	181	37	22	10
15	20	13	10	7.0	5.9	5.8	12	37	185	34	21	12
16	19	13	10	7.0	5.8	5.8	16	37	183	34	20	12
17	19	13	10	7.0	5.8	5.8	20	39	179	33	19	9.9
18	19	13	10	7.0	5.8	5.9	20	43	171	37	19	10
19	19	13	9.9	7.0	5.8	5.8	20	44	160	42	19	11
20	19	13	9.9	6.4	5.8	5.8	20	42	153	48	17	9.5
21	18	13	9.4	6.4	5.8	5.8	17	42	146	54	16	9.5
22	18	13	9.0	6.4	5.8	5.8	12	42	132	45	16	12
23	18	12	9.0	6.4	5.8	5.8	11	50	122	45	15	11
24	18	11	9.0	6.4	5.8	5.8	11	63	114	43	14	11
25	18	11	9.0	6.4	5.8	5.8	10	71	118	38	14	11
26	17	11	9.0	6.4	5.8	5.8	9.9	75	107	41	13	11
27	16	11	9.0	6.4	5.8	5.6	11	88	92	39	13	12
28	16	11	9.0	6.4	5.8	5.6	13	107	81	36	13	14
29	16	11	9.0	6.4	---	5.5	14	122	72	36	13	12
30	16	11	9.0	6.4	---	5.4	17	113	67	34	12	11
31	16	---	9.0	6.2	---	5.4	---	98	---	32	12	---
TOTAL	607	394	305.2	225.9	166.9	178.6	314.3	1792	4426	1369	639	349.9
MEAN	19.6	13.1	9.85	7.29	5.96	5.76	10.5	57.8	148	44.2	20.6	11.7
MAX	25	16	11	9.0	6.2	5.9	20	122	247	64	33	16
MIN	16	11	9.0	6.2	5.8	5.4	5.1	23	67	32	12	9.5
AC-FT	1200	781	605	448	331	354	623	3550	8780	2720	1270	694

WTR YR 1985 TOTAL 10767.8 MEAN 29.5 MAX 247 MIN 5.1 AC-FT 21360

09035870 SOUTH FORK OF WILLIAMS FORK BELOW SHORT CREEK NEAR PTARMIGAN PASS, CO--Continued

PERIOD OF RECORD.--October 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV 01...	11:40	1.5	68	7.8	--	9.5	9.7	2.1	1.6
APR 30...	14:45	--	72	7.6	6.5	9.2	9.5	2.2	1.7
JUN 04...	12:50	--	54	7.6	7.0	8.9	7.3	1.5	1.2
AUG 13...	09:30	--	73	7.9	6.0	8.5	9.5	2.1	1.5

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV 01...	0.8	29	5.8	0.2	0.3	6.3	23	44
APR 30...	1.0	29	6.4	0.3	0.3	6.4	42	45
JUN 04...	0.7	19	5.1	0.2	0.2	5.8	33	34
AUG 13...	0.7	27	5.2	0.3	0.3	6.1	48	42

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
NOV 01...	0.01	0.13	--	<0.2	0.01	<0.01	<0.01	<0.01
APR 30...	0.04	0.10	--	0.5	0.05	<0.01	0.01	<0.05
JUN 04...	0.04	0.17	0.47	0.3	0.05	<0.01	<0.01	<0.01
AUG 13...	0.03	0.10	0.3	0.2	0.04	<0.01	<0.01	<0.01

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
NOV 01...	11:40	<10	<1	63	<10	<1	<1	<1	5	25
APR 30...	14:45	40	<1	25	<10	<1	<1	<1	2	54
JUN 04...	12:50	30	<1	22	<10	<1	<1	1	1	25
AUG 13...	09:30	10	<1	21	<10	<1	<1	<1	1	24

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 01...	1	<4	4	<0.1	1	<1	<1	<1	15
APR 30...	<1	<4	5	--	3	<1	<1	<1	6
JUN 04...	10	<4	3	<0.1	<1	2	<1	<1	10
AUG 13...	<1	<4	3	<0.1	1	<1	<1	<1	9

09035900 SOUTH FORK OF WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°47'45", long 106°01'48", in NE¼ sec.17, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 800 ft upstream from highway bridge, 0.6 mi upstream from mouth, and 1.2 mi southeast of Leal.

DRAINAGE AREA.--27.3 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,950 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 16 to Apr. 23. Records good except for estimated daily discharges, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 32.8 ft^3/s; 23,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 464 ft^3/s, June 15, 1978, gage height 3.37 ft; maximum gage height, 4.22 ft, Nov. 22, 1979 (backwater from ice); minimum daily discharge, 2.6 ft^3/s, Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 8	2100	*345	*3.34	June 13	2100	249	3.13
June 12	2100	232	3.09				

Minimum daily discharge, 7.4 ft^3/s, Jan. 18-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	22	13	12	8.4	7.8	7.8	33	102	71	32	20
2	24	22	13	12	8.4	7.8	7.8	45	105	69	34	21
3	23	21	13	12	8.4	7.8	8.0	61	109	67	30	21
4	26	21	13	12	8.4	7.8	8.2	75	114	64	28	25
5	32	20	13	12	8.4	7.8	8.4	80	131	62	27	23
6	31	17	13	11	8.4	7.8	8.6	78	161	59	26	20
7	29	17	13	11	8.4	7.8	8.8	78	203	58	25	20
8	27	18	13	10	8.4	7.8	9.0	80	257	56	23	20
9	27	17	13	9.8	8.4	7.8	9.4	77	280	55	24	19
10	27	17	13	9.6	8.4	7.8	10	81	256	52	23	18
11	26	17	13	9.4	8.4	7.8	10	64	212	49	23	18
12	25	16	13	9.2	8.0	7.8	11	54	196	47	26	21
13	26	16	13	9.0	7.8	7.8	12	48	200	52	21	18
14	25	15	13	8.8	7.8	7.0	14	44	201	45	19	18
15	22	15	13	8.4	7.8	7.4	16	48	201	42	18	19
16	22	14	13	8.4	7.8	7.6	19	47	198	40	17	20
17	22	14	13	8.4	7.8	7.8	22	49	193	38	17	16
18	22	14	13	8.4	7.8	7.8	24	55	185	42	16	13
19	22	13	13	8.4	7.8	7.8	26	59	175	49	17	14
20	22	13	13	8.4	7.8	7.8	25	56	162	57	17	13
21	22	13	13	8.4	7.8	7.8	23	55	156	67	18	13
22	22	13	13	8.4	7.8	7.8	22	54	140	51	18	15
23	22	13	13	8.4	7.8	7.8	21	63	129	51	18	15
24	22	13	13	8.4	7.8	7.8	20	76	122	49	18	15
25	22	13	13	8.4	7.8	7.8	18	85	130	42	18	15
26	22	13	12	8.4	7.8	7.8	18	87	119	44	19	15
27	22	13	12	8.4	7.8	7.8	17	95	101	43	19	16
28	22	13	12	8.4	7.8	7.8	21	113	90	38	19	19
29	22	13	12	8.4	---	7.8	23	126	84	37	19	17
30	22	13	12	8.4	---	7.8	25	123	77	35	18	16
31	22	---	12	8.4	---	7.8	---	109	---	33	19	---
TOTAL	745	469	397	290.6	225.2	240.4	473.0	2198	4789	1564	666	533
MEAN	24.0	15.6	12.8	9.37	8.04	7.75	15.8	70.9	160	50.5	21.5	17.8
MAX	32	22	13	12	8.4	7.8	26	126	280	71	34	25
MIN	22	13	12	8.4	7.8	7.0	7.8	33	77	33	16	13
AC-FT	1480	930	787	576	447	477	938	4360	9500	3100	1320	1060

CAL YR 1984	TOTAL	20360.1	MEAN	55.6	MAX	294	MIN	7.4	AC-FT	40380
WTR YR 1985	TOTAL	12590.2	MEAN	34.5	MAX	280	MIN	7.0	AC-FT	24970

NOTE.--NO GAGE-HEIGHT RECORD NOV. 10 TO APR. 23.

09036000 WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°50'02", long 106°03'21", in sec.31, T.2 S., R.77 W., Grand County, Hydrologic Unit 14010001, on right bank at downstream side of bridge, 100 ft downstream from Kinney Creek, and 1.7 mi northwest of Leal.

DRAINAGE AREA.--89.5 mi².

PERIOD OF RECORD.--July 1933 to current year. Records since May 10, 1940, equivalent to earlier records if diversion to August P. Gumlick Tunnel is added to flow past station. Prior to October 1958, published as Williams River near Leal.

REVISED RECORDS.--WSP 1733: 1951. WSP 2124: Drainage area. WRD Colo. 1973: 1972.

GAGE.--Water-stage recorder. Elevation of gage is 8,790 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 16, 1953, at site 15 ft downstream at present datum.

REMARKS.--Estimated Daily discharges: Dec. 22, Jan. 1-2, 12, Feb. 1-11. Records good, except for estimated daily discharges, which are poor. Transmountain diversion above station through August P. Gumlick Tunnel (see table below for figures of diversion). Diversions for irrigation of about 200 acres of hay meadows above station and about 40 acres below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Diversions, in acre-feet, through August P. Gumlick Tunnel, furnished by Colorado Division of Water Resources.

AVERAGE DISCHARGE.--52 years, 105 ft³/s; 76,070 acre-ft/yr, including diversions to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,720 ft³/s, June 10, 1952, gage height, 4.23 ft; maximum gage height, 5.46 ft, June 29, 1971 (backwater from log); minimum daily discharge, 13 ft³/s, at times in 1939, 1963, 1964, and 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,110 ft³/s at 2200 June 8, gage height, 4.09 ft; minimum daily discharge, 19 ft³/s, Mar. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	55	41	30	28	20	22	99	397	250	116	37
2	60	52	41	30	27	20	23	119	411	202	123	40
3	59	55	40	30	25	20	24	144	438	178	101	39
4	72	49	40	30	25	20	25	169	451	166	92	52
5	91	46	42	30	27	20	24	180	498	159	84	46
6	96	54	38	30	26	20	24	182	590	150	78	38
7	91	52	37	29	27	20	25	177	713	143	71	37
8	86	51	37	29	24	20	26	187	931	156	65	39
9	86	48	36	29	24	20	29	198	899	192	62	36
10	86	52	36	31	25	20	29	201	826	190	59	34
11	34	55	36	29	24	20	31	213	731	181	58	34
12	84	52	36	30	23	20	36	182	669	176	70	40
13	85	52	36	30	23	20	40	164	671	191	59	36
14	85	50	37	29	24	19	47	152	677	127	55	35
15	78	49	36	28	23	20	57	149	670	133	52	38
16	75	50	35	28	23	20	64	142	661	149	51	41
17	80	51	34	28	23	20	71	149	644	143	49	35
18	80	47	35	28	23	20	85	169	616	154	49	35
19	80	45	34	27	22	22	87	177	577	181	49	36
20	69	43	32	27	22	21	69	169	546	148	46	33
21	66	45	32	27	21	20	61	176	530	188	44	33
22	65	46	32	27	21	21	56	181	493	150	44	43
23	62	45	32	30	21	21	56	173	458	138	43	48
24	58	45	32	28	20	22	57	204	430	130	40	48
25	56	44	35	27	21	22	54	247	451	120	39	48
26	55	43	31	28	20	23	52	263	421	122	38	46
27	62	40	31	28	20	22	59	289	373	123	38	50
28	60	43	31	27	21	21	74	351	327	115	39	54
29	59	42	32	27	---	22	83	381	301	129	37	51
30	56	41	30	27	---	21	83	468	277	126	37	48
31	54	---	31	29	---	23	---	432	---	113	36	---
TOTAL	2239	1442	1088	887	653	640	1473	6487	16677	4823	1824	1230
MEAN	72.2	48.1	35.1	28.6	23.3	20.6	49.1	209	556	156	58.8	41.0
MAX	96	55	42	31	28	23	87	468	931	250	123	54
MIN	54	40	30	27	20	19	22	99	277	113	36	33
AC-FT	4440	2860	2160	1760	1300	1270	2920	12870	33080	9570	3620	2440
a	319	380	263	218	124	127	184	1480	0	2050	925	411

CAL YR 1984 TOTAL 65529 MEAN 179 MAX 1010 MIN 21 AC-FT 130000
WTR YR 1985 TOTAL 39463 MEAN 108 MAX 931 MIN 19 AC-FT 78270

a-DIVERSIONS, IN ACRE-FEET, THROUGH AUGUST P. GUMLICK TUNNEL, FURNISHED BY COLORADO DIVISION OF WATER RESOURCES.

09037500 WILLIAMS FORK NEAR PARSHALL, CO

LOCATION.--Lat 40°00'01", long 106°10'45", in SW¼SW¼ sec.31, T.1 N., R.78 W., Grand County, Hydrologic Unit 14010001, on left bank 150 ft downstream from bridge on State Highway 286, 3.7 mi downstream from Skylark Creek, 3.9 mi south of Parshall, and 4.2 mi upstream from Williams Fork Reservoir Dam.

DRAINAGE AREA.--184 mi².

PERIOD OF RECORD.--July 1904 to September 1924, June 1933 to current year. Records since May 10, 1940, equivalent to earlier records if diversion to August P. Gumlick Tunnel is added to flow past station. Published as "near (Hot) Sulphur Springs" 1904-12 and as Williams River near Parshall June 1933 to September 1958.

REVISED RECORDS.--WSP 1243: 1918. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,808.95 ft, (Denver Board of Water Commissioners Datum). See WSP 1733 for history of changes prior to Aug. 9, 1938. Aug. 10, 1938 to Aug. 19, 1983 gage located on right bank at present datum.

REMARKS.--Estimated daily discharges: Oct. 1-23, Nov. 16 to Apr. 17. Records good except for periods of estimated daily discharge, which are poor. Transmountain diversion above station through August P. Gumlick Tunnel (station 09036000). Diversions above station for irrigation of about 1,300 acres above station and about 2,500 acres below. About 150 acres above station irrigated by diversions into the drainage area. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--72 years, 138 ft³/s; 99,980 acre-ft/yr, including diversion to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 2,620 ft³/s, June 14, 1918, gage height, 6.05 ft, site and datum then in use, from rating curve extended above 1,400 ft³/s; minimum daily, 4.8 ft³/s, May 6, 8-10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,420 ft³/s at 0400 June 9, gage height, 4.08 ft; minimum daily, 37 ft³/s, July 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	91	74	61	50	45	50	274	516	116	63	52
2	80	86	74	60	50	45	50	322	405	70	72	54
3	82	91	74	60	50	45	50	383	392	54	65	54
4	86	81	74	60	50	45	50	425	392	49	58	63
5	90	81	76	59	50	45	50	450	415	46	56	58
6	90	97	70	59	50	45	52	440	511	40	55	52
7	92	86	69	58	50	45	54	455	640	37	53	50
8	90	83	68	58	50	45	56	455	908	39	51	54
9	90	81	68	58	50	45	58	504	1150	62	47	51
10	90	86	67	57	50	44	60	500	989	60	52	49
11	90	90	66	57	49	43	70	515	769	107	83	48
12	90	86	66	56	49	42	84	431	635	56	78	52
13	90	84	65	56	49	43	100	381	617	73	86	50
14	94	81	64	56	48	45	120	326	623	45	78	48
15	94	81	64	55	48	46	140	315	589	40	73	48
16	90	81	64	55	48	46	160	301	589	46	65	53
17	90	80	63	55	48	46	200	301	572	39	63	48
18	90	80	62	54	47	46	252	316	523	46	63	45
19	90	76	62	54	47	46	255	319	456	105	65	44
20	90	72	62	54	47	46	191	307	406	97	61	44
21	90	74	62	53	47	46	168	307	450	234	59	44
22	90	76	62	53	47	47	153	322	401	188	61	46
23	90	77	62	52	46	47	144	292	311	168	58	47
24	95	76	62	52	46	48	146	277	274	138	57	47
25	93	72	62	52	46	48	138	307	319	132	56	47
26	100	74	62	52	46	48	136	322	300	110	56	49
27	102	76	62	51	45	49	140	335	257	118	54	52
28	102	77	62	51	45	49	188	380	212	95	55	54
29	97	77	62	51	---	50	192	384	168	86	55	54
30	91	74	62	50	---	50	230	583	142	81	53	54
31	91	---	62	50	---	50	---	617	---	72	50	---
TOTAL	2819	2427	2034	1709	1348	1430	3737	11846	14932	2649	1901	1511
MEAN	90.9	80.9	65.6	55.1	48.1	46.1	125	382	498	85.5	61.3	50.4
MAX	102	97	76	61	50	50	255	617	1150	234	86	63
MIN	80	72	62	50	45	42	50	274	142	37	47	44
AC-FT	5590	4810	4030	3390	2670	2840	7410	23500	29620	5250	3770	3000

CAL YR 1984 TOTAL 92915 MEAN 254 MAX 1700 MIN 28 AC-FT 184300
WTR YR 1985 TOTAL 48343 MEAN 132 MAX 1150 MIN 37 AC-FT 95890

NOTE.--NO GAGE-HEIGHT RECORD NOV. 16 TO APR. 17.

09038000 WILLIAMS FORK RESERVOIR NEAR PARSHALL, CO

LOCATION.--Lat 40°02'06", long 106°12'17", in SE¼ sec.23, T.1 N., R.79 W., Grand County, Hydrologic Unit 14010001, at dam on Williams Fork, 2.1 mi upstream from mouth, and 2.2 mi southwest of Parshall.

DRAINAGE AREA.--230 mi².

PERIOD OF RECORD.--April 1939 to current year. Prior to October 1948, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city engineer of Denver); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete-arch dam completed in October 1938; storage began April 1939; dam was enlarged Dec. 5, 1956, to Apr. 22, 1959. Enlarged capacity, 96,820 acre-ft, between elevations 7,634 ft, invert of outlet, and 7,811 ft, top of radial gates on spillway. No dead storage. Figures given represent usable contents. Reservoir is used for power development and to store water to compensate for water diverted through August P. Gumlick Tunnel. Water is released during periods of low flow in Colorado River to supply decreed prior water rights. Records provided by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 97,130 acre-ft, July 9, 1962, elevation, 7,811.19 ft; no contents at times in 1958 (construction) and 1966 (drained for repairs).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 92,160 acre-ft, June 28, 29, elevation, 7,808.07 ft; minimum, 42,580 acre-ft, Apr. 7, elevation, 7,766.60 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,807.46	91,220	-
Oct. 31	7,802.68	84,100	-7,120
Nov. 30	7,795.61	74,380	-9,720
Dec. 31	7,786.38	62,890	-11,490
CAL YR 1984	-	-	+3,780
Jan. 31	7,775.01	50,600	-12,290
Feb. 28	7,771.18	46,840	-3,760
Mar. 31	7,767.05	42,990	-3,850
Apr. 30	7,771.56	47,210	+4,220
May 31	7,794.08	72,380	+25,170
June 30	7,808.04	92,120	+19,740
July 31	7,804.46	86,700	-5,420
Aug. 31	7,797.33	76,670	-10,030
Sept. 30	7,799.18	79,180	+2,510
WTR YR 1985	-	-	-12,040

09038500 WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO

LOCATION.--Lat 40°02'07", long 106°12'17", in SE¼ sec.23, T.1 N., R.79 W., Grand County, Hydrologic Unit 14010001, on left bank 400 ft downstream from Williams Fork Reservoir, 2.1 mi upstream from mouth, and 2.1 mi southwest of Parshall.

DRAINAGE AREA.--230 mi².

PERIOD OF RECORD.--October 1948 to September 1954, August 1958 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1958, published as Williams River below Williams Fork Reservoir.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,615.0 ft, (Denver Board of Water Commissioners Datum). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1959.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Williams Fork Reservoir (station 09038000). Transmountain diversion above station through August P. Gumlick Tunnel (station 09036000). Diversions above station for irrigation of about 3,200 acres above station and about 100 acres below. About 450 acres above station irrigated by diversion into the drainage area. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--33 years, 130 ft³/s; 94,180 acre-ft/yr, adjusted for storage in Williams Fork Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s, June 20, 1953, gage height, 8.50 ft, site and datum then in use, from rating curve extended above 1,500 ft³/s; no flow for part of Apr. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 268 ft³/s at 1230 Jan. 31, gage height, 2.44 ft; minimum daily, 22 ft³/s, Sept.1-2, 10-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	235	229	248	169	116	124	25	163	227	236	22
2	223	235	228	248	117	117	125	26	237	228	237	22
3	231	236	227	248	117	119	125	26	235	230	237	42
4	231	237	227	248	83	119	125	25	237	231	239	62
5	231	236	227	249	115	119	125	25	236	231	239	23
6	231	235	227	250	108	117	125	25	235	232	239	23
7	231	234	227	250	117	120	125	25	235	235	240	23
8	232	233	227	250	117	120	125	25	234	236	240	23
9	233	232	227	211	117	119	125	24	232	237	241	23
10	233	231	227	253	117	119	125	25	231	233	242	22
11	233	231	227	254	117	119	124	25	231	238	243	22
12	235	231	227	254	100	120	123	25	230	239	243	22
13	235	231	227	253	117	121	123	25	229	238	242	22
14	235	231	225	252	117	120	123	25	229	236	242	22
15	235	231	225	253	117	119	125	25	229	237	242	22
16	258	231	225	255	117	119	125	25	228	233	242	22
17	258	231	232	256	118	119	125	25	227	239	242	22
18	258	231	242	256	119	120	124	25	227	239	242	22
19	254	231	243	257	118	121	123	25	226	237	242	22
20	254	231	244	258	119	121	123	26	225	239	242	22
21	258	229	244	258	119	121	121	26	225	238	242	22
22	262	229	244	259	119	121	120	26	225	237	242	22
23	260	229	244	260	119	121	119	26	225	237	244	22
24	235	229	244	261	119	123	119	26	224	238	244	22
25	235	229	243	262	119	123	118	26	223	239	244	22
26	235	229	244	262	119	123	117	26	223	237	244	22
27	235	229	246	263	119	123	116	26	223	237	244	23
28	235	229	246	264	115	122	115	27	223	237	244	24
29	234	229	246	264	---	122	115	27	225	236	245	24
30	234	229	246	265	---	122	83	27	225	235	245	24
31	235	---	247	267	---	123	---	27	---	235	133	---
TOTAL	7414	6944	7284	7888	3284	3728	3630	792	6797	7301	7383	732
MEAN	239	231	235	254	117	120	121	25.5	227	236	238	24.4
MAX	262	237	247	267	169	123	125	27	237	239	245	62
MIN	223	229	225	211	83	116	83	24	163	227	133	22
AC-FT	14710	13770	14450	15650	6510	7390	7200	1570	13480	14480	14640	1450

CAL YR 1984 TOTAL 94876 MEAN 259 MAX 1150 MIN 13 AC-FT 188200
WTR YR 1985 TOTAL 63177 MEAN 173 MAX 267 MIN 22 AC-FT 125300

09039000 TROUBLESOME CREEK NEAR PEARMONT, CO

LOCATION.--Lat 40°13'03", long 106°18'45", in SE¼ sec.14, T.3 N., R.80 W., Grand County, Hydrologic Unit 14010001, on left bank 45 ft downstream from small tributary, 3 mi north of Pearmont, 4 mi downstream from Rabbit Ear Creek, 5.2 mi upstream from East Fork, and 12 mi northeast of Kremmling.

DRAINAGE AREA.--44.6 mi^2.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,049 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 20 to Apr. 7. Records good except for estimated daily discharges, which are poor. One diversion above station for irrigation of about 250 acres below. Flow partly regulated during irrigation season by one reservoir, capacity, 1,070 acre-ft, above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--32 years, 30.4 ft^3/s; 22,020 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 630 ft^3/s, June 25, 1983, gage height, 2.81 ft; maximum gage height, 3.93 ft, Mar. 31, 1965 (backwater from ice); minimum daily discharge, 4.5 ft^3/s, Dec. 20-24, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 208 ft^3/s at 0600 May 28, gage height, 1.94 ft; minimum daily, 10 ft^3/s, Mar. 22 to Apr. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	19	14	12	12	11	10	47	134	30	23	17
2	20	20	14	12	12	11	10	60	109	35	24	19
3	17	20	14	12	12	11	10	81	98	35	25	19
4	17	19	14	12	12	11	10	114	100	34	24	16
5	17	21	14	12	12	11	10	147	104	33	23	15
6	18	18	14	12	12	11	10	161	108	32	23	15
7	17	19	14	12	12	11	11	139	121	32	22	15
8	18	17	14	12	12	11	13	143	141	31	22	16
9	18	17	14	12	12	11	18	157	159	31	22	15
10	18	20	14	12	12	11	23	166	153	30	22	15
11	18	17	14	12	12	11	24	163	125	28	22	16
12	18	17	14	12	12	11	26	133	102	28	24	17
13	18	17	14	12	12	11	27	106	87	28	22	15
14	19	17	14	12	12	11	30	84	75	28	22	15
15	19	17	14	12	12	11	34	74	69	28	22	15
16	19	17	14	12	11	11	36	69	64	26	22	16
17	19	17	14	12	11	11	37	70	59	22	22	15
18	19	17	13	12	11	11	37	80	54	23	22	15
19	21	17	13	12	11	11	36	95	48	24	22	15
20	19	17	13	12	11	11	30	101	43	24	21	15
21	19	16	12	12	11	11	27	99	40	27	20	15
22	19	16	12	12	11	10	25	98	37	26	20	16
23	19	16	12	12	11	10	44	97	35	27	20	16
24	20	16	12	12	11	10	36	109	31	27	20	16
25	20	16	12	12	11	10	31	119	32	26	20	16
26	20	15	12	12	11	10	29	135	30	25	19	16
27	20	15	12	12	11	10	28	145	30	24	19	16
28	20	14	12	12	11	10	31	171	29	24	19	16
29	19	14	12	12	---	10	33	198	29	25	19	16
30	18	14	12	12	---	10	39	181	28	25	19	15
31	18	---	12	12	---	10	---	156	---	24	17	---
TOTAL	582	512	409	372	323	331	765	3698	2274	862	663	474
MEAN	18.8	17.1	13.2	12.0	11.5	10.7	25.5	119	75.8	27.8	21.4	15.8
MAX	21	21	14	12	12	11	44	198	159	35	25	19
MIN	17	14	12	12	11	10	10	47	28	22	17	15
AC-FT	1150	1020	811	738	641	657	1520	7330	4510	1710	1320	940

CAL YR 1984 TOTAL 17021 MEAN 46.5 MAX 440 MIN 10 AC-FT 33760
WTR YR 1985 TOTAL 11265 MEAN 30.9 MAX 198 MIN 10 AC-FT 22340

NOTE.--NO GAGE-HEIGHT RECORD DEC. 20 TO APR. 7.

09041500 MUDDY CREEK AT KREMMLING, CO

LOCATION.--Lat 40°03'37", long 106°23'48", in SW¼SE¼ sec. 7, T.1 N., R.80 W., Grand County, Hydrologic Unit 14010001, on left bank 450 ft upstream from U.S. Highway 40 bridge at Kremmling and 2.8 mi upstream from mouth.

DRAINAGE AREA.--290 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August to October 1904, April to October 1905. Monthly discharge only in WSP 1313. April 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,340 ft above National Geodetic Vertical Datum of 1929, from topographic map. Supplementary recorder on diversion ditch about 2,000 ft downstream from point of diversion.

REMARKS.--Estimated daily discharges: Nov. 11 to Mar. 22. Records good, except for estimated daily discharges, which are poor. Records include flow of diversion ditch.

EXTREMES FOR PERIOD OF RECORD.--Maximum combined discharge, 1,670 ft^3/s, May 16, 1984, gage height, 12.67 ft; minimum daily, 1.0 ft^3/s, Sept. 24, 25, 1905.

EXTREMES FOR CURRENT YEAR.--Maximum combined discharge, 1,260 ft^3/s at 2300 May 6, gage height, 11.59 ft; minimum daily, 5.5 ft^3/s, Sept. 18-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	32	22	24	23	25	33	489	554	85	36	11
2	25	30	22	24	23	25	43	578	502	81	29	12
3	27	30	22	24	23	25	104	668	479	74	53	13
4	31	33	23	24	23	25	121	812	414	66	31	16
5	36	24	23	24	23	25	75	1000	383	62	27	18
6	42	29	23	24	23	25	76	1180	387	54	27	14
7	45	32	24	24	23	25	93	1180	358	48	26	11
8	36	30	24	24	23	25	109	1050	381	48	26	9.5
9	30	32	25	24	23	25	136	1040	392	55	25	8.1
10	30	24	25	24	24	25	148	1060	392	52	22	7.5
11	30	22	25	24	24	25	178	1110	332	57	22	6.8
12	28	22	25	24	24	25	182	1030	261	57	26	6.8
13	28	22	25	24	24	25	208	872	238	70	27	6.7
14	27	21	25	24	24	27	233	698	190	60	27	6.2
15	29	21	25	24	24	29	281	605	192	55	24	6.2
16	29	20	25	24	24	30	361	572	178	59	22	6.2
17	27	20	25	24	24	32	474	588	183	57	20	8.8
18	31	19	25	23	24	34	544	634	168	78	20	5.5
19	28	19	25	23	24	45	597	686	148	178	24	5.5
20	34	19	25	23	24	80	441	720	138	110	21	5.5
21	39	19	25	23	24	94	369	679	124	95	20	5.5
22	36	19	25	23	25	96	342	648	121	71	18	6.2
23	35	19	25	23	25	73	307	635	113	67	17	6.2
24	34	19	25	23	25	62	292	643	113	79	16	7.5
25	30	20	25	23	25	112	275	700	125	61	13	8.8
26	28	20	25	23	25	161	269	728	127	50	13	8.8
27	32	20	25	23	25	81	242	729	116	43	13	8.1
28	29	21	24	23	25	52	295	722	110	39	13	7.5
29	32	21	24	23	---	44	365	729	96	36	13	9.5
30	34	21	24	23	---	42	360	719	92	57	16	18
31	32	---	24	23	---	39	---	652	---	38	12	---
TOTAL	978	700	754	730	670	1458	7553	24156	7407	2042	699	270.4
MEAN	31.5	23.3	24.3	23.5	23.9	47.0	252	779	247	65.9	22.5	9.01
MAX	45	33	25	24	25	161	597	1180	554	178	53	18
MIN	24	19	22	23	23	25	33	489	92	36	12	5.5
AC-FT	1940	1390	1500	1450	1330	2890	14980	47910	14690	4050	1390	536

CAL YR 1984 TOTAL 63569 MEAN 174 MAX 1590 MIN 19 AC-FT 126100
WTR YR 1985 TOTAL 47417.4 MEAN 130 MAX 1180 MIN 5.5 AC-FT 94050

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March to September 1985.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM
MAR												
20...	11:00	72	1120	8.2	0.0	9.6	450	310	74	64	92	31
APR												
26...	11:30	286	428	8.3	4.0	9.5	200	60	52	16	20	18
MAY												
03...	11:00	702	310	8.2	8.5	8.4	130	29	36	9.1	11	15
07...	10:35	1140	276	8.0	6.5	8.7	120	34	33	7.8	10	16
22...	11:00	666	238	8.2	8.0	9.0	98	26	28	6.7	7.7	14
JUN												
27...	11:45	87	725	9.2	13.5	7.9	330	180	86	28	26	15
JUL												
25...	09:15	65	1080	8.5	15.5	7.2	520	340	130	48	50	17
SEP												
03...	10:00	13	1100	8.3	16.0	7.0	520	360	120	54	52	18

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
MAR												
20...	2	6.1	143	480	11	0.2	9.3	820	1.1	160	0.30	--
APR												
26...	0.6	2.3	136	100	3.1	0.2	9.7	290	0.39	220	0.40	--
MAY												
03...	0.4	2.5	99	61	2.1	0.2	8.7	190	0.26	361	0.40	--
07...	0.4	1.7	81	58	0.9	0.1	8.7	170	0.23	522	0.30	0.45
22...	0.4	1.2	72	45	1.2	0.1	8.8	140	0.19	256	0.10	--
JUN												
27...	0.6	2.5	149	230	2.5	0.2	9.8	480	0.65	112	<0.10	--
JUL												
25...	1	3.8	187	370	5.2	0.3	12	730	0.99	128	<0.10	--
SEP												
03...	1	3.2	165	370	4.9	0.3	6.2	710	0.96	25	<0.10	--

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
MAR												
20...	0.21	--	0.89	--	1.1	--	1.4	0.30	--	--	10	9.2
APR												
26...	0.06	--	1.2	--	1.3	--	1.7	<0.01	--	--	--	--
MAY												
03...	0.44	--	1.6	--	2.0	--	2.4	0.24	--	--	25	6.9
07...	0.14	0.05	0.96	0.55	1.1	0.6	1.4	0.33	0.02	<0.01	11	7.6
22...	0.16	--	0.74	--	0.9	--	1.0	0.37	--	--	--	--
JUN												
27...	0.05	--	0.55	--	0.6	--	--	0.06	--	--	--	--
JUL												
25...	0.06	--	2.3	--	2.4	--	--	0.45	--	--	12	8.4
SEP												
03...	0.05	--	0.35	--	0.4	--	--	0.02	--	--	--	--

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1984

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
MAR									
20...	11:00	--	--	--	--	--	--	--	--
APR									
26...	11:30	--	--	--	--	--	--	--	--
MAY									
03...	11:00	--	--	--	--	--	--	--	--
07...	09:50	2	<1	400	260	1	<1	20	10
22...	10:40	--	--	--	--	--	--	--	--
JUN									
27...	10:45	--	--	--	--	--	--	--	--
JUL									
25...	09:35	--	--	--	--	--	--	--	--
SEP									
03...	10:15	--	--	--	--	--	--	--	--

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)
MAR									
20...	--	--	--	67	--	--	--	--	--
APR									
26...	--	--	--	46	--	--	--	--	--
MAY									
03...	--	--	--	220	--	--	--	--	--
07...	7	19	4	130	10	5	150	19	<0.1
22...	--	--	--	93	--	--	--	--	--
JUN									
27...	--	--	--	50	--	--	--	--	--
JUL									
25...	--	--	--	440	--	--	--	--	--
SEP									
03...	--	--	--	9	--	--	--	--	--

DATE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR									
20...	--	--	--	--	--	--	770	--	--
APR									
26...	--	--	--	--	--	--	440	--	--
MAY									
03...	--	--	--	--	--	--	290	--	--
07...	<1	20	4	3	1	<1	270	70	79
22...	--	--	--	--	--	--	240	--	--
JUN									
27...	--	--	--	--	--	--	770	--	--
JUL									
25...	--	--	--	--	--	--	--	--	--
SEP									
03...	--	--	--	--	--	--	1300	--	--

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
MAR												
20...	11:00	72	180	35	--	--	--	--	--	--	--	--
29...	11:00	36	61	5.9	--	--	--	95	--	--	--	--
APR												
17...	15:15	456	2610	3210	--	--	--	93	--	--	--	--
26...	11:05	286	308	238	--	--	--	86	--	--	--	--
MAY												
01...	12:30	568	2640	4050	--	--	--	88	--	--	--	--
03...	10:15	702	2920	5530	42	49	68	93	99	100	--	--
03...	10:30	702	3120	5910	--	--	--	89	--	--	--	--
06...	11:15	1120	692	2090	59	76	91	95	97	99	100	--
06...	11:30	1120	734	2220	--	--	--	96	--	--	--	--
07...	09:40	1140	450	1390	58	70	88	95	96	97	99	100
07...	10:35	1140	440	1350	--	--	--	96	--	--	--	--
09...	11:10	981	404	1070	52	63	80	89	94	98	99	100
15...	10:50	621	175	293	--	--	--	34	--	--	--	--
22...	11:00	666	311	559	--	--	--	80	--	--	--	--
JUN												
06...	10:45	368	256	254	--	--	--	79	--	--	--	--
27...	11:45	87	67	16	--	--	--	56	--	--	--	--
JUL												
25...	09:15	65	631	111	--	--	--	99	--	--	--	--
SEP												
03...	10:00	13	59	2.1	--	--	--	91	--	--	--	--

09041900 MONTE CRISTO DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'51", long 106°04'15", in NE¼SE¼ sec.2, T.8 S., R.78W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 1,800 ft downstream from diversion point, 1.4 mi northwest of Hoosier Pass, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 10,986 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. This is a transmountain diversion from Monte Cristo Creek in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion point is in SW¼NE¼ sec.2, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with city of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 52 ft³/s, June 29, 1985; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	.00	.00	.00	.00	.00	.00	.00	.00	4.0	1.6	4.0
2	20	.00	.00	.00	.00	.00	.00	.00	.00	2.0	1.6	4.0
3	22	.00	.00	.00	.00	.00	.00	.00	.00	6.4	1.3	4.0
4	24	.00	.00	.00	.00	.00	.00	.00	.00	6.0	1.2	4.0
5	23	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.0	4.0
6	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.2	3.9
7	22	.00	.00	.00	.00	.00	.00	.00	.00	.00	7.0	3.9
8	21	.00	.00	.00	.00	.00	.00	.00	12	.00	7.5	4.0
9	21	.00	.00	.00	.00	.00	.00	.00	15	13	7.9	4.3
10	21	.00	.00	.00	.00	.00	.00	.00	19	25	7.7	4.3
11	21	.00	.00	.00	.00	.00	.00	.00	5.9	25	7.7	6.7
12	20	.00	.00	.00	.00	.00	.00	.00	1.1	25	7.7	12
13	19	.00	.00	.00	.00	.00	.00	.00	.00	26	7.7	12
14	19	.00	.00	.00	.00	.00	.00	.00	.00	26	7.7	12
15	19	.00	.00	.00	.00	.00	.00	.00	.00	4.4	15	16
16	19	.00	.00	.00	.00	.00	.00	.00	.00	4.8	33	21
17	18	.00	.00	.00	.00	.00	.00	.00	.00	13	34	20
18	18	.00	.00	.00	.00	.00	.00	.00	.00	22	33	20
19	18	.00	.00	.00	.00	.00	.00	.00	.00	25	18	20
20	18	.00	.00	.00	.00	.00	.00	.00	.00	27	4.7	19
21	18	.00	.00	.00	.00	.00	.00	.00	.00	12	4.0	19
22	18	.00	.00	.00	.00	.00	.00	.00	.00	.80	4.0	23
23	13	.00	.00	.00	.00	.00	.00	.00	.00	.60	4.0	40
24	4.5	.00	.00	.00	.00	.00	.00	.00	.00	.60	4.0	38
25	.00	.00	.00	.00	.00	.00	.00	.00	1.8	.60	4.0	36
26	.00	.00	.00	.00	.00	.00	.00	.00	2.6	.60	4.0	34
27	.00	.00	.00	.00	.00	.00	.00	.00	1.7	5.5	3.9	32
28	.00	.00	.00	.00	.00	.00	.00	.00	1.6	14	4.0	31
29	.00	.00	.00	.00	---	.00	.00	.00	52	10	4.0	28
30	.00	.00	.00	.00	---	.00	.00	.00	34	3.0	4.0	24
31	.00	---	.00	.00	---	.00	---	.00	---	2.0	4.0	---
TOTAL	458.50	.00	.00	.00	.00	.00	.00	.00	146.70	304.30	250.4	504.1
MEAN	14.8	.00	.00	.00	.00	.00	.00	.00	4.89	9.82	8.08	16.8
MAX	24	.00	.00	.00	.00	.00	.00	.00	52	27	34	40
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.0	3.9
AC-FT	909	.00	.00	.00	.00	.00	.00	.00	291	604	497	1000

CAL YR 1984 TOTAL 1773.34 MEAN 4.85 MAX 60 MIN .00 AC-FT 3520
WTR YR 1985 TOTAL 1664.00 MEAN 4.56 MAX 52 MIN .00 AC-FT 3300

09044300 BEMROSE-HOOSIER DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'50", long 106°04'13", in NE¼SE¼ sec.2, T.8 S., R.78W., Summit County, Hydrologic Unit 14010002, on right bank at entrance to Hoosier Pass tunnel, 1.4 mi northwest of Hoosier Pass, 1.6 mi downstream from diversion point on Bemrose Creek, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 10,986 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. This is a transmountain diversion from Bemrose and Hoosier Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in SW¼SW¼ sec.6, T.8 S., R.77 W., and in sec.12, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with city of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 44 ft^3/s, June 21, 1965; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	.00	.00	.00	.00	.00	.00	.00	9.3	7.6	3.8	2.1
2	2.3	.00	.00	.00	.00	.00	.00	.00	12	7.4	1.9	2.1
3	2.5	.00	.00	.00	.00	.00	.00	.00	13	6.9	4.8	2.1
4	2.7	.00	.00	.00	.00	.00	.00	.00	14	6.7	4.7	2.2
5	2.5	.00	.00	.00	.00	.00	.00	.00	16	5.2	4.5	2.2
6	2.9	.00	.00	.00	.00	.00	.00	.00	21	5.4	4.3	2.1
7	2.9	.00	.00	.00	.00	.00	.00	.00	32	5.4	4.1	2.0
8	2.4	.00	.00	.00	.00	.00	.00	.00	32	5.0	3.8	1.9
9	2.4	.00	.00	.00	.00	.00	.00	.00	19	5.4	3.7	1.9
10	2.4	.00	.00	.00	.00	.00	.00	.00	20	5.4	3.7	1.9
11	2.4	.00	.00	.00	.00	.00	.00	.00	15	5.2	3.5	1.5
12	2.6	.00	.00	.00	.00	.00	.00	.00	16	5.2	3.5	.00
13	2.2	.00	.00	.00	.00	.00	.00	.00	17	5.4	3.2	.00
14	2.1	.00	.00	.00	.00	.00	.00	.00	16	5.0	3.2	.00
15	2.1	.00	.00	.00	.00	.00	.00	.00	16	4.5	2.9	.00
16	1.9	.00	.00	.00	.00	.00	.00	3.0	15	4.2	2.7	.00
17	2.1	.00	.00	.00	.00	.00	.00	3.2	18	4.8	2.6	.00
18	2.1	.00	.00	.00	.00	.00	.00	4.0	19	5.2	2.6	.00
19	2.1	.00	.00	.00	.00	.00	.00	4.0	18	1.2	2.5	.00
20	2.1	.00	.00	.00	.00	.00	.00	3.5	16	1.3	2.5	.00
21	2.1	.00	.00	.00	.00	.00	.00	3.3	15	.01	2.9	.00
22	2.1	.00	.00	.00	.00	.00	.00	3.3	14	.00	2.6	.00
23	.00	.00	.00	.00	.00	.00	.00	4.1	12	6.6	2.6	.00
24	.00	.00	.00	.00	.00	.00	.00	5.4	12	6.7	2.5	.00
25	.00	.00	.00	.00	.00	.00	.00	6.9	13	6.3	2.6	.00
26	.00	.00	.00	.00	.00	.00	.00	7.2	11	6.1	2.5	.00
27	.00	.00	.00	.00	.00	.00	.00	7.6	9.3	5.7	2.3	.00
28	.00	.00	.00	.00	.00	.00	.00	10	8.2	5.6	2.3	.00
29	.00	.00	.00	.00	---	.00	.00	11	8.2	5.4	2.2	.00
30	.00	.00	.00	.00	---	.00	.00	10	7.8	5.0	2.1	.00
31	.00	---	.00	.00	---	.00	---	9.3	---	4.8	2.2	---
TOTAL	51.20	.00	.00	.00	.00	.00	.00	95.80	464.8	154.61	95.3	22.00
MEAN	1.65	.00	.00	.00	.00	.00	.00	3.09	15.5	4.99	3.07	.73
MAX	2.9	.00	.00	.00	.00	.00	.00	11	32	7.6	4.8	2.2
MIN	.00	.00	.00	.00	.00	.00	.00	.00	7.8	.00	1.9	.00
AC-FT	102	.00	.00	.00	.00	.00	.00	190	922	307	189	44

CAL YR 1984 TOTAL 1144.20 MEAN 3.13 MAX 27 MIN .00 AC-FT 2270
WTR YR 1985 TOTAL 883.71 MEAN 2.42 MAX 32 MIN .00 AC-FT 1750

09044800 MCCULLOUGH-SPRUCE-CRYSTAL DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'51", long 106°04'14", in NE¼SE¼ sec.2, T.8 S., R.78 W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 1.4 mi northwest of Hoosier Pass, 1.6 mi downstream from diversion point on McCullough Gulch, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1961, Published as McCullough diversion near Hoosier Pass.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 10,986 ft, above National Geodetic Vertical datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: June 5-8. Records good except for estimated daily discharges, which are poor. This is a transmountain diversion from McCullough Gulch and Spruce and Crystal Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in secs.14, 23, and 26, T.7 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with city of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 123 ft³/s, June 20, 1968, June 19, 1983; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	12	.00	5.4
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	15	4.7	6.3
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	20	8.8	6.7
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	12	7.8	7.0
5	.00	.00	.00	.00	.00	.00	.00	.00	6.0	.00	7.0	7.8
6	.00	.00	.00	.00	.00	.00	.00	.00	22	.00	6.1	6.5
7	.00	.00	.00	.00	.00	.00	.00	.00	35	.00	5.9	5.8
8	.00	.00	.00	.00	.00	.00	.00	.00	41	.00	5.9	5.0
9	.00	.00	.00	.00	.00	.00	.00	.00	49	.00	6.1	4.7
10	.00	.00	.00	.00	.00	.00	.00	.00	41	.00	5.4	2.4
11	.00	.00	.00	.00	.00	.00	.00	.00	44	.00	5.0	.45
12	.00	.00	.00	.00	.00	.00	.00	.00	45	.00	5.0	.40
13	.00	.00	.00	.00	.00	.00	.00	.00	2.2	.72	3.8	.40
14	.00	.00	.00	.00	.00	.00	.00	.00	4.0	.00	3.4	.40
15	.00	.00	.00	.00	.00	.00	.00	.00	4.9	.00	3.0	.40
16	.00	.00	.00	.00	.00	.00	.00	.00	7.2	.00	2.7	.40
17	.00	.00	.00	.00	.00	.00	.00	.00	9.0	.00	2.9	.40
18	.00	.00	.00	.00	.00	.00	.00	.00	6.5	3.4	3.0	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	4.7	18	3.0	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	1.3	8.9	2.7	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	3.2	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.4	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.6	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.2	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	12	.00	2.7	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	6.6	.00	2.7	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.17	.00	2.7	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	3.0	.00	3.8	.00
29	.00	.00	.00	.00	---	.00	.00	.00	14	.00	5.8	.00
30	.00	.00	.00	.00	---	.00	.00	.00	13	.00	5.2	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	5.4	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	371.59	90.02	133.90	60.45
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	12.4	2.90	4.32	2.01
MAX	.00	.00	.00	.00	.00	.00	.00	.00	49	20	8.8	7.8
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	737	179	266	120

CAL YR 1984	TOTAL	560.83	MEAN	1.53	MAX	30	MIN	.00	AC-FT	1110
WTR YR 1985	TOTAL	655.96	MEAN	1.80	MAX	49	MIN	.00	AC-FT	1300

09046490 BLUE RIVER AT BLUE RIVER, CO

LOCATION.--Lat 39°27'21", long 106°01'52", in NE¼SE¼ sec.7, T.7 S, R.77 W., Summit County, Hydrologic Unit 14010002 on left bank, 350 ft below spillway of Goose Pasture Tarn Dam, 2.0 mi southeast of Breckenridge.

DRAINAGE AREA.--22.6 mi^2.

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,385 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Feb. 1 to Mar. 12. Records good, except for estimated daily discharges, which are poor. Transmountain diversions above station by Boreas Pass ditch and Hoosier Pass tunnel. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 506 ft^3/s July 1, 1984, gage-height, 2.84 ft, minimum daily, 5.8 ft^3/s, Mar. 20-21, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 328 ft^3/s, June 9, gage-height, 2.52 ft, minimum daily, 7.0 ft^3/s, Feb. 17-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	34	22	16	10	7.2	10	33	105	106	55	21
2	31	34	22	15	10	7.2	9.0	42	105	106	60	23
3	32	34	21	16	10	7.2	10	55	110	70	45	22
4	38	32	20	15	10	7.2	11	67	112	65	42	23
5	37	31	19	15	10	7.2	9.5	77	121	88	39	23
6	35	32	20	15	9.0	7.2	10	70	136	95	38	22
7	33	32	20	15	9.0	7.2	10	58	180	95	36	21
8	33	31	20	16	9.0	7.2	12	68	234	94	35	21
9	33	30	20	15	9.0	7.2	15	72	268	91	34	21
10	33	28	20	15	9.0	7.2	14	70	231	84	34	20
11	32	29	21	15	8.0	7.2	15	71	178	72	32	22
12	31	27	21	15	8.0	7.2	15	61	158	71	32	30
13	33	26	20	15	8.0	7.2	16	54	189	94	32	27
14	34	28	19	15	8.0	7.2	19	48	174	86	30	26
15	29	26	20	15	8.0	7.2	23	48	177	92	29	26
16	28	25	19	15	7.6	7.7	28	49	180	86	28	27
17	27	25	19	15	7.0	8.1	33	51	177	85	28	26
18	29	24	19	15	7.0	8.1	38	55	164	76	27	26
19	27	24	19	15	7.0	8.6	34	61	139	112	28	27
20	29	24	18	15	7.0	8.1	27	57	133	124	27	27
21	28	21	19	15	7.0	8.1	25	57	156	169	26	27
22	28	22	18	15	7.0	8.1	23	58	161	183	26	28
23	28	22	18	13	7.0	8.1	22	59	144	186	26	29
24	29	22	17	12	7.0	8.6	22	66	139	153	25	28
25	35	22	17	12	7.0	8.1	22	79	141	133	24	29
26	35	23	17	12	7.2	8.6	21	85	98	117	24	27
27	38	21	17	13	7.2	8.6	20	89	85	86	24	28
28	37	22	16	13	7.2	10	25	106	73	62	26	30
29	36	22	16	13	---	10	27	119	64	60	24	31
30	35	21	15	12	---	10	27	125	65	57	23	27
31	34	---	16	11	---	10	---	110	---	54	22	---
TOTAL	999	794	585	444	227.2	246.8	592.5	2120	4397	3052	981	765
MEAN	32.2	26.5	18.9	14.3	8.11	7.96	19.7	68.4	147	98.5	31.6	25.5
MAX	38	34	22	16	10	10	38	125	268	186	60	31
MIN	27	21	15	11	7.0	7.2	9.0	33	64	54	22	20
AC-FT	1980	1570	1160	881	451	490	1180	4210	8720	6050	1950	1520

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CAL YR 1984  TOTAL   26090.3      MEAN   71.3    MAX    404    MIN    5.8    AC-FT  51750
WTR YR 1985  TOTAL   15203.5      MEAN   41.7    MAX    268    MIN    7.0    AC-FT  30160
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NOTE.--NO GAGE-HEIGHT RECORD FEB. 1 TO MAR. 12.

09046600 BLUE RIVER NEAR DILLON, CO

LOCATION.--Lat 39°32'55", long 106°02'19", in NW¼NE¼ sec.7, T.6 S., R.77 W., Summit County, Hydrologic Unit 14010002, on right bank 0.2 mi downstream from Swan River and 5.5 mi south of Dillon.

DRAINAGE AREA.--119 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Transmountain diversions above station by Boreas Pass ditch and Hoosier Pass tunnel (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years, 105 ft^3/s; 76,070 acre-ft/yr, adjusted for diversions to Hoosier Pass tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,250 ft^3/s, June 17, 1965, gage height, 5.38 ft, from rating curve extended above 800 ft^3/s; minimum daily, 17 ft^3/s, Mar. 21, 1961, Feb. 24-26, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 826 ft^3/s at 1400 June 9, gage height, 4.54 ft; minimum daily, 26 ft^3/s, Mar. 7-9, 13-19, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	95	59	42	33	28	33	142	362	237	151	79
2	108	93	57	41	31	28	35	196	350	263	164	78
3	110	91	55	40	30	28	36	267	349	240	159	79
4	112	91	54	40	30	27	36	344	343	211	135	80
5	118	85	54	39	30	27	37	413	344	206	129	79
6	120	84	53	39	30	27	40	423	354	225	125	80
7	117	86	52	39	30	26	47	401	439	228	122	80
8	109	84	53	38	30	26	51	380	563	225	114	79
9	109	83	54	38	30	26	42	399	702	225	110	80
10	107	79	54	37	30	27	40	402	708	216	110	78
11	107	77	55	36	30	27	45	412	592	203	108	77
12	103	77	54	36	30	27	52	379	485	194	105	76
13	101	78	52	36	30	26	59	329	486	200	102	80
14	109	77	51	35	30	26	67	295	492	214	98	82
15	110	77	51	35	30	26	79	279	482	204	98	80
16	103	76	50	35	29	26	95	272	480	202	95	79
17	97	74	50	34	29	26	115	273	480	198	93	80
18	95	73	49	34	29	26	130	277	444	194	92	81
19	93	71	50	34	29	26	133	291	409	227	89	80
20	91	66	48	34	29	27	124	297	380	259	91	80
21	92	64	49	34	29	27	111	296	379	288	89	80
22	91	63	46	34	29	27	99	311	381	305	87	81
23	90	64	46	34	30	26	94	312	361	315	85	82
24	87	65	45	33	30	27	92	315	347	303	83	85
25	86	63	45	33	30	28	93	323	357	282	81	85
26	89	62	45	33	28	27	93	338	321	262	80	84
27	95	59	44	33	28	27	99	340	292	226	81	85
28	96	58	44	32	28	34	109	358	266	194	82	86
29	96	58	44	32	---	34	118	390	246	170	82	87
30	95	58	43	32	---	32	126	407	226	162	82	90
31	96	---	43	32	---	32	---	383	---	156	80	---
TOTAL	3138	2231	1549	1104	831	854	2330	10244	12420	7034	3202	2432
MEAN	101	74.4	50.0	35.6	29.7	27.5	77.7	330	414	227	103	81.1
MAX	120	95	59	42	33	34	133	423	708	315	164	90
MIN	86	58	43	32	28	26	33	142	226	156	80	76
AC-FT	6220	4430	3070	2190	1650	1690	4620	20320	24640	13950	6350	4820

CAL YR 1984 TOTAL 61856 MEAN 169 MAX 954 MIN 29 AC-FT 122700
WTR YR 1985 TOTAL 47369 MEAN 130 MAX 708 MIN 26 AC-FT 93960

09047500 SNAKE RIVER NEAR MONTEZUMA, CO

LOCATION.--Lat 39°36'20", long 105°56'33", in NW¼ sec.19, T.5 S., R.76 W. (projected), Summit County, Hydrologic Unit 14010002, on right bank 200 ft downstream from North Fork and 4.5 mi northwest of Montezuma.

DRAINAGE AREA.--57.7 mi².

PERIOD OF RECORD.--July 1942 to September 1946, October 1951 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,320 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 14, 1943, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Nov. 7 to May 5, July 20-29. Records good except for estimated daily discharges, poor. Small diversions above station for irrigation and domestic use. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--38 years, 61.3 ft³/s; 44,410 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,250 ft³/s, June 10, 1952, gage height, 3.51 ft; maximum gage height, 3.88 ft, June 6, 1972; minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	1900	*700	*3.67	No other peak greater than base discharge.			

Minimum daily, 14 ft³/s, Mar. 1-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	49	29	21	17	14	17	66	235	108	99	34
2	76	52	29	21	17	14	17	70	251	106	101	35
3	78	49	28	21	16	14	18	76	253	105	88	38
4	84	49	28	20	16	14	18	84	250	110	83	44
5	83	48	27	20	15	14	18	90	280	109	81	37
6	80	46	27	20	15	14	18	95	338	108	77	35
7	77	45	27	19	15	14	19	97	450	108	73	35
8	74	44	27	19	15	14	19	116	542	120	70	36
9	74	44	27	19	15	14	20	125	493	134	68	33
10	72	43	27	18	15	14	21	132	424	119	65	33
11	70	42	27	18	15	15	23	127	365	105	63	36
12	69	41	27	18	15	15	26	105	346	98	64	40
13	72	41	27	18	15	15	28	94	355	97	60	34
14	70	40	27	17	15	15	32	89	376	96	60	33
15	64	40	27	17	15	15	35	86	361	88	55	36
16	66	39	27	17	15	15	38	85	362	84	55	35
17	74	38	27	17	15	15	42	90	347	84	53	32
18	68	37	27	17	15	15	47	99	323	85	53	32
19	68	37	26	17	15	15	50	102	303	105	52	33
20	65	36	26	17	15	15	48	95	296	110	48	32
21	63	35	25	17	15	15	47	98	292	110	46	32
22	60	35	25	17	15	15	44	98	275	110	44	35
23	59	34	25	17	15	15	43	116	229	110	41	33
24	63	33	24	17	15	15	41	156	184	110	40	33
25	62	33	24	17	15	15	40	186	179	110	39	33
26	58	32	24	17	15	15	45	188	164	110	38	32
27	57	32	23	17	15	16	50	203	138	110	36	35
28	54	31	23	17	15	16	53	246	123	110	37	37
29	49	30	22	17	---	16	56	290	120	110	36	35
30	45	30	22	17	---	17	60	285	114	97	35	32
31	47	---	22	17	---	17	---	245	---	90	34	---
TOTAL	2075	1185	803	558	426	462	1033	4034	8768	3256	1794	1040
MEAN	66.9	39.5	25.9	18.0	15.2	14.9	34.4	130	292	105	57.9	34.7
MAX	84	52	29	21	17	17	60	290	542	134	101	44
MIN	45	30	22	17	15	14	17	66	114	84	34	32
AC-FT	4120	2350	1590	1110	845	916	2050	8000	17390	6460	3560	2060

CAL YR 1984	TOTAL	36258	MEAN	99.1	MAX	463	MIN	12	AC-FT	71920
WTR YR 1985	TOTAL	25434	MEAN	69.7	MAX	542	MIN	14	AC-FT	50450

09047700 KEYSTONE GULCH NEAR DILLON, CO

LOCATION.--Lat 39°35'40", long 105°58'19", in NE¼NE¼ sec.26, T.5 S., R.77 W., Summit County, Hydrologic Unit 14010002, on right bank 0.7 mi upstream from mouth and 4.7 mi southeast of Dillon.

DRAINAGE AREA.--9.10 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,350 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 6 to May 5. Records good except for estimated daily discharges, which are poor. No known diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years, 5.99 ft^3/s; 4,340 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 118 ft^3/s, June 27, 1983, gage height, 3.01 ft, from rating curve extended above 65 ft^3/s; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 55 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 8	2000	*47	*2.49	No other peak greater than base discharge.			

Minimum daily, 2.2 ft^3/s, Mar. 9-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	4.0	3.9	2.9	2.7	2.3	2.5	8.0	23	9.7	6.3	3.6
2	7.1	4.2	3.8	2.8	2.7	2.3	2.5	8.5	24	9.1	6.6	3.6
3	6.9	4.2	3.7	2.7	2.7	2.3	2.5	9.0	23	8.9	5.7	3.7
4	7.4	4.7	3.6	2.7	2.7	2.3	2.5	9.8	21	8.4	5.3	4.0
5	7.5	5.4	3.5	2.7	2.7	2.3	2.5	10	21	8.2	4.8	3.5
6	7.2	5.2	3.5	2.7	2.7	2.3	2.5	14	22	7.6	4.8	3.3
7	6.9	5.0	3.5	2.7	2.7	2.3	2.5	15	26	7.2	4.8	3.4
8	6.8	4.7	3.5	2.7	2.7	2.3	2.5	17	32	7.1	4.7	3.5
9	6.8	4.5	3.5	2.7	2.7	2.2	2.5	17	35	6.9	4.7	3.3
10	6.8	4.5	3.5	2.7	2.7	2.2	2.5	18	33	6.7	4.6	3.3
11	6.6	4.5	3.5	2.7	2.6	2.2	2.5	17	28	6.6	4.6	3.5
12	6.5	4.5	3.5	2.7	2.5	2.2	2.9	14	25	6.5	4.7	3.6
13	6.6	4.5	3.5	2.7	2.4	2.2	3.3	13	25	6.5	4.4	3.4
14	6.3	4.5	3.5	2.7	2.3	2.3	4.0	14	25	6.2	4.2	3.2
15	6.3	4.5	3.5	2.7	2.3	2.3	4.5	14	24	6.2	4.1	3.6
16	6.2	4.4	3.5	2.7	2.3	2.3	5.6	12	22	6.1	4.1	3.5
17	7.5	4.3	3.5	2.7	2.3	2.3	6.5	14	22	7.2	4.0	3.2
18	5.9	4.2	3.5	2.7	2.3	2.3	8.0	15	20	7.8	4.2	3.3
19	6.5	4.1	3.5	2.7	2.3	2.3	10	14	20	8.5	4.1	3.3
20	5.5	4.0	3.5	2.7	2.3	2.3	9.5	14	18	7.5	3.9	3.2
21	5.7	4.0	3.3	2.7	2.3	2.3	9.0	14	17	6.7	3.9	3.2
22	5.3	4.0	3.2	2.7	2.3	2.3	8.2	15	15	6.5	3.7	3.6
23	5.3	4.0	3.0	2.7	2.3	2.3	7.6	17	14	7.8	3.7	3.5
24	5.1	4.0	3.0	2.7	2.3	2.3	7.2	19	13	7.5	3.6	3.5
25	5.0	4.0	3.0	2.7	2.3	2.3	6.8	19	14	7.1	3.6	3.6
26	5.7	4.0	3.0	2.7	2.3	2.3	6.4	19	12	6.6	3.6	3.7
27	5.9	4.0	3.0	2.7	2.3	2.3	6.0	19	12	6.1	3.5	3.9
28	5.0	4.0	3.0	2.7	2.3	2.3	6.4	22	11	5.9	3.6	4.1
29	4.0	4.0	3.0	2.7	---	2.3	6.8	25	11	5.9	3.3	3.9
30	4.1	4.0	3.0	2.7	---	2.3	7.4	26	10	5.8	3.3	3.9
31	4.0	---	3.0	2.7	---	2.4	---	23	---	5.5	3.3	---
TOTAL	189.8	129.9	104.5	84.0	69.0	70.9	153.6	485.3	618	220.3	133.7	105.9
MEAN	6.12	4.33	3.37	2.71	2.46	2.29	5.12	15.7	20.6	7.11	4.31	3.53
MAX	7.5	5.4	3.9	2.9	2.7	2.4	10	26	35	9.7	6.6	4.1
MIN	4.0	4.0	3.0	2.7	2.3	2.2	2.5	8.0	10	5.5	3.3	3.2
AC-FT	376	258	207	167	137	141	305	963	1230	437	265	210

CAL YR 1984	TOTAL	4877.4	MEAN	13.3	MAX	81	MIN	1.8	AC-FT	9670
WTR YR 1985	TOTAL	2364.9	MEAN	6.48	MAX	35	MIN	2.2	AC-FT	4690

NOTE.--NO GAGE-HEIGHT RECORD NOV. 7 TO MAY 5.

09050100 TENMILE CREEK BELOW NORTH TENMILE CREEK, AT FRISCO, CO

LOCATION.--Lat 39°34'37", long 106°06'33", in SE¼NW¼ sec.34, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 220 ft upstream from bridge on U.S. Highway 6, 160 ft downstream from North Tenmile Creek, and 0.6 mi west of Frisco.

DRAINAGE AREA.--93.3 mi².

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1971, published as "below North Fork, at Frisco."

GAGE.--Water-stage recorder. Elevation of gage is 9,100 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 21, 1981 at site 720 ft downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 1-8 to Apr. 2, July 15-17. Records good, except for estimated daily discharges, which are poor. Natural flow of stream affected by a few small diversions above station for irrigation and municipal use and transbasin diversion from Robinson Reservoir, capacity, 2,520 acre-ft, in Eagle River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years, 99.8 ft³/s; 72,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,910 ft³/s, June 16, 1965, gage height, 6.15 ft, from rating curve extended above 750 ft³/s; minimum daily, 7 ft³/s, Mar. 8, 14, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	2245	*1,270	*4.23	No other peak greater than base discharge.			

Minimum daily, 20 ft³/s, Dec. 31 to Jan. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	76	50	20	27	33	27	137	365	232	156	64
2	76	76	50	20	27	33	27	184	361	233	154	69
3	77	74	50	20	27	33	27	239	410	233	144	70
4	82	73	50	20	27	33	26	304	409	234	131	75
5	85	80	50	22	27	33	26	326	462	234	123	80
6	91	76	42	25	30	33	28	293	571	233	121	73
7	88	73	35	27	32	33	32	306	748	226	115	70
8	84	74	28	27	34	33	34	362	980	215	106	74
9	80	76	25	27	34	33	41	390	952	212	104	70
10	79	79	25	27	34	33	33	398	807	225	101	67
11	79	80	25	27	34	33	37	381	607	217	99	67
12	77	81	25	27	34	33	45	306	535	224	108	72
13	79	82	25	27	34	33	60	262	564	250	101	67
14	84	85	25	27	34	33	70	235	586	225	91	64
15	72	86	25	27	34	33	87	222	550	220	88	64
16	74	88	25	27	34	30	106	234	572	210	85	69
17	74	80	25	27	34	27	120	244	562	200	83	65
18	77	80	25	27	34	27	141	277	542	196	80	61
19	74	80	25	27	34	27	170	293	491	247	80	64
20	76	80	25	27	34	27	141	274	474	283	79	59
21	74	80	25	27	34	27	112	275	471	309	74	58
22	73	80	25	27	34	27	103	295	436	328	76	68
23	72	75	25	27	34	27	94	334	411	328	73	65
24	74	73	25	27	34	27	94	411	386	293	72	68
25	74	73	25	27	34	27	93	444	430	254	69	63
26	75	72	25	27	34	27	93	415	384	232	68	65
27	74	72	25	27	34	27	93	443	336	216	69	70
28	76	72	25	27	34	27	88	535	302	196	70	65
29	77	60	25	27	---	27	98	528	270	195	70	80
30	78	50	23	27	---	27	99	502	250	193	70	70
31	79	---	20	27	---	27	---	415				
TOTAL												
MEAN	77.7	76.2	29.8	25.9	32.5	30.0	75.2	331	508	235	94.4	67.9
MAX	91	88	50	27	34	33	170	535	980	328	156	80
MIN	72	50	20	20	27	27	26	137	250	177	65	58
AC-FT	4780	4530	1830	1590	1810	1840	4470	20360	30240	14420	5800	4040

	TOTAL		MEAN		MAX		MIN		AC-FT	
CAL YR 1984	TOTAL	68705	MEAN	188	MAX	971	MIN	14	AC-FT	136300
WTR YR 1985	TOTAL	48256	MEAN	132	MAX	980	MIN	20	AC-FT	95720

09050700 BLUE RIVER BELOW DILLON, CO

LOCATION.--Lat 39°37'32", long 106°03'57", in SE¼SE¼ sec.12, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 0.3 mi downstream from Dillon Dam, 0.1 mi upstream from Straight Creek, and 1.1 mi west of Dillon.

DRAINAGE AREA.--335 mi^2.

PERIOD OF RECORD.--January 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,760 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since Sept. 3, 1963, by Dillon Reservoir, 0.3 mi upstream (station 09050600). Natural flow of stream affected by transmountain diversions, transbasin diversions, and diversions above station for irrigation of about 400 acres of hay meadows. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years (water years 1964-85), 212 ft^3/s; 153,600 acre-ft/yr, since completion of Dillon Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,010 ft^3/s, May 25, 1984 gage height, 3.88 ft; maximum gage-height, 3.95 ft, June 22, 1983; no flow, Sept. 4 to Nov. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,870 ft^3/s at 1000 June 10, gage height, 3.83 ft; minimum daily, 11.0 ft^3/s, Oct. 25, Mar. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	15	380	103	97	13	235	243	425	686	390	430
2	16	15	380	103	95	13	165	243	425	666	380	430
3	16	15	380	103	95	13	65	349	435	642	372	430
4	17	15	380	95	87	13	50	430	455	624	349	267
5	16	14	380	87	79	13	74	430	465	600	518	183
6	15	12	380	87	79	11	119	430	651	588	618	283
7	15	20	379	87	79	13	119	430	1090	582	524	287
8	15	91	376	63	79	13	98	430	1470	570	465	287
9	15	140	376	87	79	13	119	430	1770	558	445	287
10	12	347	236	87	79	13	147	430	1850	558	435	287
11	14	346	107	87	79	14	172	430	1770	546	435	287
12	72	344	103	87	79	14	172	430	1620	524	440	287
13	259	367	106	88	79	14	172	430	1530	512	440	287
14	259	390	112	89	79	14	172	430	1520	512	440	287
15	211	327	116	89	79	14	208	430	1490	507	440	287
16	150	185	116	92	79	14	204	430	1480	496	445	287
17	87	388	116	98	79	14	308	430	1470	490	445	287
18	15	390	116	98	78	23	336	430	1450	475	445	287
19	15	390	116	98	60	70	400	430	1380	518	445	287
20	15	386	92	98	76	116	440	430	1320	570	445	287
21	16	390	126	98	76	168	435	430	1260	606	445	283
22	16	390	127	98	76	215	380	430	1220	648	440	283
23	16	390	129	98	79	239	283	430	1150	686	440	283
24	16	385	129	101	79	235	223	430	1090	680	440	216
25	11	385	126	98	12	235	201	420	1100	654	440	278
26	15	385	106	98	12	231	223	420	1050	600	435	279
27	16	385	74	98	13	231	247	420	986	564	435	279
28	16	385	103	98	12	231	247	420	895	518	435	279
29	16	380	103	98	---	231	243	425	811	470	435	279
30	14	380	103	98	---	231	243	425	744	440	435	279
31	15	---	103	98	---	235	---	425	---	415	435	---
TOTAL	1437	8052	5976	2907	1974	2917	6500	12820	34372	17505	13731	8779
MEAN	46.4	268	193	93.8	70.5	94.1	217	414	1146	565	443	293
MAX	259	390	380	103	97	239	440	430	1850	686	618	430
MIN	11	12	74	63	12	11	50	243	425	415	349	183
AC-FT	2850	15970	11850	5770	3920	5790	12890	25430	68180	34720	27240	17410

CAL YR 1984 TOTAL 201568.4 MEAN 551 MAX 1940 MIN 9.4 AC-FT 399800
WTR YR 1985 TOTAL 116970 MEAN 320 MAX 1850 MIN 11 AC-FT 232000

09052000 ROCK CREEK NEAR DILLON, CO

LOCATION.--Lat 39°43'23", long 106°07'41", in NE¼ sec.9, T.4 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 500 ft upstream from bridge on State Highway 9, 1,100 ft upstream from mouth, 1,200 ft downstream from confluence of North and South Rock Creeks, and 8 mi northwest of Dillon.

DRAINAGE AREA.--15.8 mi².

PERIOD OF RECORD.--July 1942 to September 1956, October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,502.52 ft, (Colorado Highway Department datum). Prior to Apr. 21, 1943, nonrecording gage, and Apr. 21, 1943, to Sept. 13, 1950, water-stage recorder, at site 500 ft downstream at datum 28.76 ft, lower.

REMARKS.--Estimated discharges: Nov. 10, Nov. 15 to Apr. 8. Records good except for estimated daily discharges, which are poor. A few small diversions for irrigation of hay meadows above and below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--33 years, (water years 1943-56, 1967-85), 23.2 ft³/s; 16,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 289 ft³/s, June 10, 1973, gage height, 4.35 ft, from rating curve extended above 154 ft³/s; maximum gage height, 4.36 ft, June 24, 1971; minimum daily discharge, 2.2 ft³/s, Apr. 13, 17, 1945.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	2000	*168	*3.93	No other peak greater than base discharge.			

Minimum daily, 4.5 ft³/s, Mar. 7-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	12	8.0	6.0	6.0	5.0	5.2	28	54	44	35	13
2	18	13	8.0	6.0	6.0	5.0	5.4	35	55	51	38	14
3	18	11	7.6	6.0	6.0	5.0	5.6	44	65	55	35	15
4	20	12	7.2	6.0	6.0	5.0	5.8	57	68	57	32	17
5	20	15	7.0	6.0	6.0	5.0	6.0	62	76	57	30	15
6	19	11	7.0	6.0	6.0	4.7	6.4	59	85	57	28	14
7	18	10	7.0	6.0	6.0	4.5	6.6	53	107	57	27	13
8	17	10	7.0	6.0	5.8	4.5	7.0	62	139	55	26	12
9	17	10	7.0	6.0	5.6	4.5	7.2	63	118	54	26	11
10	17	10	7.0	6.0	5.5	4.5	6.8	59	103	53	25	11
11	16	11	7.0	6.0	5.4	4.5	8.3	54	80	51	24	11
12	16	11	7.0	6.0	5.2	4.5	9.9	41	73	50	27	13
13	18	10	7.0	6.0	5.1	4.7	11	35	75	59	22	11
14	18	9.9	7.0	6.0	5.0	5.0	14	31	75	54	19	9.7
15	16	9.8	7.0	6.0	5.0	5.0	18	31	76	47	18	9.7
16	16	9.4	7.0	6.0	5.0	5.0	21	33	79	44	17	11
17	19	9.0	7.0	6.0	5.0	5.0	24	36	81	42	17	9.6
18	16	8.6	7.0	6.0	5.0	5.0	27	41	84	47	17	9.4
19	16	8.2	7.0	6.0	5.0	5.0	27	43	82	53	17	9.7
20	15	8.0	7.0	6.0	5.0	5.0	23	38	80	72	16	9.0
21	14	8.0	6.8	6.0	5.0	5.0	20	39	84	70	16	8.9
22	14	8.0	6.6	6.0	5.0	5.0	17	36	80	69	16	11
23	13	8.0	6.4	6.0	5.0	5.0	15	38	74	64	16	10
24	14	8.0	6.2	6.0	5.0	5.0	14	54	77	60	16	9.2
25	15	8.0	6.0	6.0	5.0	5.0	14	68	95	52	15	9.1
26	15	8.0	6.0	6.0	5.0	5.0	13	68	79	47	14	8.8
27	13	8.0	6.0	6.0	5.0	5.0	13	70	55	52	13	9.3
28	12	8.0	6.0	6.0	5.0	5.0	16	78	44	42	14	13
29	12	8.0	6.0	6.0	---	5.0	19	81	49	38	14	11
30	12	8.0	6.0	6.0	---	5.0	21	77	49	37	13	9.6
31	12	---	6.0	6.0	---	5.0	---	63	---	36	13	---
TOTAL	494	288.9	210.8	186.0	149.6	151.4	407.2	1577	2341	1626	656	338.0
MEAN	15.9	9.63	6.80	6.00	5.34	4.88	13.6	50.9	78.0	52.5	21.2	11.3
MAX	20	15	8.0	6.0	6.0	5.0	27	81	139	72	38	17
MIN	12	8.0	6.0	6.0	5.0	4.5	5.2	28	44	36	13	8.8
AC-FT	980	573	18	369	297	300	808	3130	4640	3230	1300	670

CAL YR 1984	TOTAL	12161.2	MEAN	33.2	MAX	168	MIN	3.3	AC-FT 24120
WTR YR 1985	TOTAL	8425.9	MEAN	23.1	MAX	139	MIN	4.5	AC-FT 16710

NOTE.--NO GAGE HEIGHT RECORD NOV. 24 TO APR. 8.

09052400 BOULDER CREEK AT UPPER STATION, NEAR DILLON, CO

LOCATION.--Lat 39°43'41", long 106°10'22", in SW¼SW¼ sec.6, T.4 S., R.78 W., Summit County, Hydrologic Unit 14010002, on left bank 1.2 mi downstream from Boulder Lake, 3.2 mi upstream from mouth, and 9.4 mi northwest of Dillon.

DRAINAGE AREA.--8.56 mi^2.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,460 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 15 to May 5. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 17.3 ft^3/s; 12,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 316 ft^3/s, July 1, 1984, gage height, 3.42 ft; minimum daily, 0.80 ft^3/s, Jan. 6, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 120 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 8	2230	*218	*3.05	No other peak greater than base discharge.			

Minimum daily, 2.3 ft^3/s, Mar. 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.8	6.0	4.3	3.0	2.5	2.5	23	41	44	34	9.7
2	12	8.6	5.9	4.0	3.0	2.5	2.5	25	47	55	34	11
3	13	8.2	5.8	3.8	3.0	2.5	2.5	27	62	62	33	11
4	14	8.0	5.6	3.5	3.0	2.5	2.5	29	66	67	29	13
5	16	8.0	5.5	3.5	3.0	2.5	2.5	31	76	66	26	12
6	15	8.0	5.4	3.5	3.0	2.5	2.5	31	101	66	24	10
7	14	8.0	5.3	3.5	3.0	2.5	2.5	28	134	66	23	9.3
8	14	8.0	5.2	3.5	3.0	2.5	2.5	34	165	63	23	9.0
9	13	8.0	5.1	3.5	3.0	2.4	2.8	39	155	61	23	8.5
10	13	8.0	5.0	3.5	3.0	2.3	3.0	36	134	57	22	7.6
11	12	8.0	5.0	3.3	2.9	2.3	3.3	36	95	55	20	7.3
12	12	8.0	5.0	3.2	2.8	2.3	3.8	25	82	56	23	8.5
13	13	8.0	5.0	3.0	2.6	2.3	4.5	18	90	69	17	7.9
14	13	8.0	5.0	3.0	2.5	2.5	5.0	16	96	55	15	7.1
15	13	7.8	5.0	3.0	2.5	2.5	6.0	16	98	46	13	7.3
16	13	7.6	5.0	3.0	2.5	2.5	7.0	19	106	45	13	8.2
17	13	7.4	5.0	3.0	2.5	2.5	8.5	23	107	44	12	7.6
18	13	7.2	5.0	3.0	2.5	2.5	10	31	99	47	12	7.1
19	13	7.0	5.0	3.0	2.5	2.5	12	30	91	52	12	7.1
20	12	6.8	5.0	3.0	2.5	2.5	14	26	87	67	12	6.5
21	12	6.4	5.0	3.0	2.5	2.5	17	26	96	78	13	6.5
22	12	6.2	4.8	3.0	2.5	2.5	20	22	91	71	13	7.9
23	11	6.1	4.5	3.0	2.5	2.5	18	24	76	65	13	7.6
24	11	6.0	4.5	3.0	2.5	2.5	16	38	74	61	12	6.8
25	11	6.0	4.5	3.0	2.5	2.5	15	53	107	48	11	6.5
26	10	6.0	4.5	3.0	2.5	2.5	15	55	77	47	11	6.3
27	10	6.0	4.5	3.0	2.5	2.5	17	61	48	57	10	6.1
28	9.8	6.0	4.5	3.0	2.5	2.5	18	73	41	43	9.6	7.6
29	9.5	6.0	4.5	3.0	---	2.5	20	77	46	37	9.3	9.0
30	9.2	6.0	4.5	3.0	---	2.5	21	71	46	36	9.3	7.9
31	9.0	---	4.5	3.0	---	2.5	---	54	---	34	9.3	---
TOTAL	376.5	218.1	155.1	100.1	75.8	76.6	276.9	1097	2634	1720	540.5	247.9
MEAN	12.1	7.27	5.00	3.23	2.71	2.47	9.23	35.4	87.8	55.5	17.4	8.26
MAX	16	8.8	6.0	4.3	3.0	2.5	21	77	165	78	34	13
MIN	9.0	6.0	4.5	3.0	2.5	2.3	2.5	16	41	34	9.3	6.1
AC-FT	747	433	308	199	150	152	549	2180	5220	3410	1070	492

CAL YR 1984	TOTAL	9843.9	MEAN	26.9	MAX	181	MIN	2.0	AC-FT	19530
WTR YR 1985	TOTAL	7518.5	MEAN	20.6	MAX	165	MIN	2.3	AC-FT	14910

NOTE.--NO GAGE-HEIGHT RECORD OCT. 15 TO MAY 5.

09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, CO

LOCATION.--Lat 39°45'47", long 106°11'31", in SW¼NW¼ sec.25, T.3 S., R.79 W., Summit County, Hydrologic Unit 14010002, on left bank 0.2 mi upstream from unnamed tributary, 2.7 mi upstream from mouth, and 12 mi northwest of Dillon.

DRAINAGE AREA.--14.2 mi^{2}.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 4-5, 8-10, 12-29, Dec. 25 to Mar. 15. Records good except for estimated daily discharges, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 26.6 ft^{3}/s; 19,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 485 ft^{3}/s, Aug. 5, 1983, gage height, 6.14 ft, from rating curve extended above 170 ft^{3}/s; maximum gage height, 6.56 ft, May 2, 1975 (backwater from beaver dam and ice); minimum daily discharge, 1.0 ft^{3}/s, Mar. 14, 1974, Jan. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft^{3}/s, and maximum (*):

Date	Time	Discharge (ft^{3}/s)	Gage height (ft)	Date	Time	Discharge (ft^{3}/s)	Gage height (ft)
June 9	0100	*279	*5.20	No other peak greater than base discharge.			

Minimum daily, 3.1 ft^{3}/s, Mar. 17, 19-21, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	10	7.6	4.5	3.9	3.5	3.5	28	59	58	47	16
2	21	11	7.3	4.5	3.9	3.5	3.7	37	58	69	48	18
3	21	9.1	6.3	4.5	3.9	3.5	4.1	44	72	77	48	19
4	22	9.0	6.0	4.4	3.8	3.5	3.9	52	85	86	43	23
5	26	8.6	5.7	4.3	3.8	3.5	3.7	56	109	88	39	22
6	25	8.5	5.5	4.3	3.8	3.5	3.7	52	149	87	36	18
7	24	8.3	5.5	4.3	3.8	3.5	4.2	48	194	89	35	16
8	22	8.2	5.5	4.3	3.7	3.5	5.8	51	234	84	34	15
9	21	8.2	5.7	4.3	3.5	3.5	6.0	57	225	81	34	14
10	20	8.2	5.5	4.3	3.4	3.5	6.5	56	202	78	33	12
11	19	8.5	5.6	4.3	3.5	3.5	8.3	55	144	70	30	11
12	19	8.2	6.1	4.3	3.6	3.5	9.8	43	115	71	36	14
13	19	8.0	5.9	4.3	3.6	3.5	12	37	127	100	29	13
14	19	8.0	5.3	4.2	3.6	3.5	15	31	136	81	25	11
15	17	8.0	5.1	4.1	3.6	3.5	18	30	138	63	22	11
16	18	8.0	5.1	4.1	3.6	3.2	22	35	151	62	21	15
17	19	8.0	5.1	4.1	3.6	3.1	25	39	151	61	20	12
18	20	8.0	5.1	4.1	3.6	3.2	29	47	144	70	20	11
19	18	8.0	5.1	4.1	3.5	3.1	28	47	129	81	20	12
20	16	8.0	5.1	4.1	3.5	3.1	21	42	121	115	19	10
21	16	8.0	5.1	4.1	3.5	3.1	16	42	134	131	19	9.2
22	14	8.0	5.2	4.1	3.5	3.2	14	39	129	104	20	13
23	14	8.0	5.1	4.1	3.5	3.1	14	40	103	84	20	14
24	18	8.0	5.1	4.0	3.5	3.2	13	60	92	91	19	12
25	16	8.0	5.0	3.9	3.5	3.5	11	76	137	70	16	11
26	17	8.0	5.0	3.9	3.5	3.6	11	79	108	60	15	10
27	15	8.0	5.0	3.9	3.5	3.3	12	88	64	69	15	10
28	14	8.0	5.0	3.9	3.5	3.5	15	105	54	56	15	14
29	11	8.0	4.7	3.9	---	3.4	18	105	61	50	15	14
30	10	8.1	4.6	3.9	---	3.5	22	90	62	52	15	11
31	11	---	4.6	3.9	---	3.5	---	74	---	48	15	---
TOTAL	562	249.9	168.5	129.0	101.2	105.1	379.2	1685	3687	2386	823	411.2
MEAN	18.1	8.33	5.44	4.16	3.61	3.39	12.6	54.4	123	77.0	26.5	13.7
MAX	26	11	7.6	4.5	3.9	3.6	29	105	234	131	48	23
MIN	10	8.0	4.6	3.9	3.4	3.1	3.5	28	54	48	15	9.2
AC-FT	1110	496	334	256	201	208	752	3340	7310	4730	1630	816

CAL YR 1984 TOTAL 15004.2 MEAN 41.0 MAX 279 MIN 3.1 AC-FT 29760
WTR YR 1985 TOTAL 10687.1 MEAN 29.3 MAX 234 MIN 3.1 AC-FT 21200

NOTE.--NO GAGE-HEIGHT RECORD DEC. 30 TO MAR. 15.

09054000 BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, CO

LOCATION.--Lat 39°47'59", long 106°16'04", in SW¼SW¼ sec.8, T.3 S., R.79 W., Summit County, Hydrologic Unit 14010002, on right bank 600 ft upstream from bridge, 0.3 mi downstream from Black Lake, 4.5 mi upstream from highwater line of Green Mountain Reservoir at elevation 7,950 ft, and 17 mi northwest of Dillon.

DRAINAGE AREA.--15.0 mi^2.

PERIOD OF RECORD.--July 1942 to September 1949, October 1966 to current year.

REVISED RECORDS.--WSP 2124: Drainage area, WDR CO-77-2: 1976.

GAGE.--Water-stage recorder. Elevation of gage is 8,750 ft above National Geodetic Vertical Datum of 1929, from topographic map. July 17, 1942, to May 27, 1943, nonrecording gage, and May 28, 1943, to Sept. 30, 1949, water-stage recorder at site 600 ft downstream at different datums.

REMARKS.--Estimated daily discharges: Dec. 4 to Apr. 30, May 8. Records good except for estimated daily discharges, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years, 32.8 ft^3/s; 23,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 555 ft^3/s, June 25, 1983, gage height, 4.74 ft, from rating curve extended above 240 ft^3/s, maximum gage height, 5.64 ft, June 30, 1984; minimum daily discharge, 1.3 ft^3/s, Feb. 22, 1976, Jan. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 8	2400	*305	*5.28	July 21	0700	234	4.99

Minimum daily discharge, 2.4 ft^3/s, Mar. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	11	7.1	4.5	3.0	2.5	2.7	27	75	79	67	34
2	19	11	7.0	4.5	3.0	2.5	2.8	33	75	94	66	36
3	19	10	7.0	4.2	3.0	2.5	3.0	50	97	103	68	38
4	21	8.7	6.6	4.0	3.0	2.5	3.1	65	112	112	64	40
5	25	8.2	6.0	3.7	3.0	2.5	3.3	77	131	116	57	38
6	27	8.0	5.6	3.5	3.0	2.5	3.4	80	155	117	51	32
7	26	7.6	5.3	3.5	3.0	2.5	3.6	81	190	116	51	28
8	24	7.6	5.0	3.5	3.0	2.5	4.0	84	224	114	51	27
9	23	7.6	5.0	3.5	3.0	2.5	4.5	84	226	112	52	25
10	23	7.6	5.0	3.5	3.0	2.4	5.0	83	194	106	50	24
11	21	7.6	5.0	3.5	3.0	2.5	5.8	83	146	98	47	23
12	20	7.6	5.0	3.5	2.9	2.5	6.7	64	125	101	58	24
13	19	7.3	5.0	3.5	2.8	2.5	8.0	53	135	133	49	24
14	20	7.7	5.0	3.5	2.6	2.5	9.6	45	142	109	41	23
15	19	7.6	5.0	3.5	2.5	2.5	12	42	144	90	38	23
16	18	7.6	5.0	3.5	2.5	2.5	15	43	155	85	37	26
17	17	7.6	5.0	3.5	2.5	2.5	18	47	154	87	36	25
18	18	7.3	4.8	3.5	2.5	2.5	21	59	153	114	37	23
19	17	7.1	4.6	3.4	2.5	2.5	28	63	141	140	37	23
20	16	7.0	4.5	3.2	2.5	2.5	35	58	136	169	36	21
21	15	6.8	4.5	3.0	2.5	2.5	33	57	147	192	37	20
22	15	6.8	4.5	3.0	2.5	2.5	29	58	143	136	38	21
23	14	7.0	4.5	3.0	2.5	2.5	26	66	124	123	39	22
24	13	7.0	4.5	3.0	2.5	2.5	25	93	121	132	36	21
25	12	7.0	4.5	3.0	2.5	2.5	22	109	158	107	34	20
26	12	7.0	4.5	3.0	2.5	2.5	21	103	128	94	32	19
27	13	7.0	4.5	3.0	2.5	2.5	19	113	87	100	31	18
28	12	7.1	4.5	3.0	2.5	2.5	21	128	71	82	32	19
29	11	7.2	4.5	3.0	---	2.5	22	127	76	72	34	21
30	11	7.2	4.5	3.0	---	2.5	25	111	83	74	34	19
31	11	---	4.5	3.0	---	2.6	---	89	---	69	34	---
TOTAL	550	231.8	158.0	106.0	76.3	77.5	437.5	2275	4048	3376	1374	757
MEAN	17.7	7.73	5.10	3.42	2.72	2.50	14.6	73.4	135	109	44.3	25.2
MAX	27	11	7.1	4.5	3.0	2.6	35	128	226	192	68	40
MIN	11	6.8	4.5	3.0	2.5	2.4	2.7	27	71	69	31	18
AC-FT	1090	460	313	210	151	154	868	4510	8030	6700	2730	1500

CAL YR 1984	TOTAL	17321.9	MEAN	47.3	MAX	254	MIN	2.3	AC-FT	34360
WTR YR 1985	TOTAL	13467.1	MEAN	36.9	MAX	226	MIN	2.4	AC-FT	26710

NOTE.--NO GAGE-HEIGHT RECORD DEC. 4 TO APR. 30.

09055300 CATARACT CREEK NEAR KREMMLING, CO

LOCATION.--Lat 39°50'07", long 106°18'57", in SW¼NE¼ sec.35, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, on right bank 70 ft downstream from lower Cataract Lake, 2.8 mi upstream from highwater line of Green Mountain Reservoir at elevation 7,950 ft, and 17 mi south of Kremmling.

DRAINAGE AREA.--12.0 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,605 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 20.7 ft³/s; 15,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 353 ft³/s, June 25, 1983, gage height, 5.20 ft, maximum gage height, 5.43 ft, June 21, 1967; minimum daily discharge, 0.28 ft³/s, Oct. 7, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	2400	*336	*5.07	July 21	1000	170	4.17

Minimum daily discharge, 1.5 ft³/s, Mar. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.2	3.7	2.4	2.2	1.7	2.0	26	55	42	27	3.8
2	10	6.8	3.8	2.3	2.1	1.6	2.0	34	51	46	25	4.1
3	11	6.5	3.6	2.2	2.2	1.7	2.1	44	73	49	24	4.6
4	11	6.2	3.4	2.2	2.2	1.7	2.3	53	82	49	22	5.7
5	12	5.5	3.2	2.1	2.1	1.6	2.4	58	115	54	19	6.2
6	15	5.5	3.1	2.1	2.1	1.6	2.4	55	138	55	17	5.8
7	16	5.5	2.9	2.0	2.0	1.6	2.4	55	[illegible]	52	15	6.8
8	15	5.5	2.9	2.1	2.0	1.6	2.7	69	[illegible]	46	14	5.7
9	14	5.4	2.9	2.2	2.0	1.6	3.5	67	269	44	12	4.5
10	14	5.8	2.8	2.1	2.0	1.5	4.0	68	205	42	12	3.9
11	12	5.6	2.9	2.1	2.0	1.6	4.7	65	147	39	12	3.8
12	12	5.4	3.4	2.1	1.9	1.7	6.0	46	122	37	16	7.8
13	11	5.2	3.4	2.0	1.8	1.7	7.2	38	128	50	15	5.3
14	12	5.7	3.3	2.0	1.8	1.7	8.6	30	137	44	12	4.1
15	12	5.7	3.0	2.0	1.8	1.7	11	29	133	38	9.6	4.0
16	12	5.3	2.9	1.9	1.8	1.7	15	29	149	34	8.6	4.2
17	12	5.1	2.9	2.0	1.8	1.7	18	32	144	33	7.8	4.5
18	12	4.8	2.8	2.0	1.8	1.7	24	38	143	40	7.5	3.8
19	12	4.6	2.8	1.9	1.8	1.7	27	41	114	48	7.4	3.7
20	11	4.3	2.7	1.9	1.8	1.7	22	39	110	68	6.7	3.5
21	11	4.1	2.8	2.0	1.7	1.7	17	37	115	132	6.3	3.4
22	10	4.0	2.6	2.2	1.7	1.7	14	40	114	92	5.9	3.7
23	9.9	3.9	2.5	2.2	1.7	1.7	12	43	90	69	5.6	4.9
24	9.1	3.7	2.5	2.2	1.7	1.7	12	58	84	66	5.1	5.4
25	8.5	3.7	2.5	2.2	1.7	1.7	12	86	127	55	4.8	4.9
26	8.0	3.7	2.4	2.2	1.7	1.7	11	89	102	44	4.2	4.7
27	8.9	3.6	2.4	2.2	1.7	1.7	9.9	99	59	42	4.1	4.3
28	8.5	3.6	2.4	2.1	1.7	1.8	12	122	46	37	3.9	5.7
29	7.7	3.6	2.4	2.1	---	1.9	15	129	43	33	3.9	6.8
30	7.5	3.6	2.3	2.2	---	1.9	18	112	46	32	3.8	6.0
31	7.4	---	2.4	2.2	---	1.9	---	77	---	30	3.7	---
TOTAL	342.5	149.1	89.6	65.4	52.8	52.5	302.2	1808	3586	1542	340.9	145.6
MEAN	11.0	4.97	2.89	2.11	1.89	1.69	10.1	58.3	120	49.7	11.0	4.85
MAX	16	7.2	3.8	2.4	2.2	1.9	27	129	269	132	27	7.8
MIN	7.4	3.6	2.3	1.9	1.7	1.5	2.0	26	43	30	3.7	3.4
AC-FT	679	296	178	130	105	104	599	3590	7110	3060	676	289

CAL YR 1984 TOTAL 10714.8 MEAN 29.3 MAX 238 MIN 1.2 AC-FT 21250
WTR YR 1985 TOTAL 8476.6 MEAN 23.2 MAX 269 MIN 1.5 AC-FT 16810

RESERVOIRS IN BLUE RIVER BASIN

09050600 DILLON RESERVOIR.--Lat 39°37'14", long 106°03'53", in NE¼ sec.13, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, in gatehouse at dam, 0.8 mi upstream from Straight Creek, about 1.3 mi southwest of Dillon, and 3.5 mi northeast of Frisco. DRAINAGE AREA, 335 mi^2. PERIOD OF RECORD, September 1963 to current year. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Denver Board of Water Commissioners); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

Reservoir is earth and rockfill dam. Dam completed and storage began Sept. 3, 1963; dead storage pool filled Sept. 12, 1963. Capacity, 254,000 acre-ft between elevations 8,829.00 ft, invert of outlet valve, and 9,017.00 ft, crest of spillway. Dead storage, 3,270 acre-ft. Figures given represent usable contents. Reservoir stores water for transmountain diversion to South Platte River basin through Harold D. Roberts tunnel for municipal use by city of Denver. Records provided by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 262,200 acre-ft, June 30, 1983, elevation, 9,019.46 ft; minimum since appreciable storage was attained in July 1964, 45,310 acre-ft, Apr. 20, 1965, elevation, 8,904.16 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 262,100 acre-ft, June 9, elevation, 9,019.42 ft; minimum, 228,900 acre-ft, Apr. 23, elevation, 9,008.87 ft.

9057000 GREEN MOUNTAIN RESERVOIR.--Lat 39°52'42", long 106°19'45", in NE¼ sec.15, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, in hoist house at right end of dam, 0.6 mi upstream from Elliott Creek, and 13 mi southeast of Kremmling. DRAINAGE AREA, 598 mi^2, includes 15.3 mi^2 of Elliott Creek above diversion for Elliott Creek feeder canal. PERIOD OF RECORD, November 1942 to current year. REVISED RECORDS, WSP 2124: Drainage area. GAGE, Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

Reservoir is formed by an earth and rockfill dam. Dam completed and storage began November 1942. Capacity, 146,900 acre-ft between elevations 7,800 ft, sill of outlet gate, and 7,950 ft, top of radial spillway gates. Dead storage, 7,760 acre-ft. Figures given represent usable contents. Reservoir is used for power development and storage for replacement of water diverted to South Platte River basin. Water released to fill decrees during late irrigation season when flow of Colorado River is deficient. Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 148,900 acre-ft, July 10, 1947, elevation, 7,950.95 ft; minimum since appreciable storage was attained, 388 acre-ft, Jan. 12, 1963, elevation, 7,801.70 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 145,700 acre-ft, July 21, elevation, 7,949.91 ft; minimum, 46,960 acre-ft, Mar 29, elevation, 7,885.44 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	09050600	DILLON RESERVOIR		09057000	GREEN MOUNTAIN	RESERVOIR
Sept. 30........	9,009.71	231,400	-	7,945.45	a 136,400	-
Oct. 31........	9,013.60	243,200	+11,800	7,940.77	127,100	-9,300
Nov. 30........	9,010.85	234,800	-8,400	7,938.85	123,400	-3,700
Dec. 31........	9,009.02	229,400	-5,400	7,931.21	109,200	-14,200
CAL YR 1984..	-	-	+12,300	-	-	+1,800
Jan. 31........	9,009.03	229,400	0	7,918.89	88,890	-20,310
Feb. 28........	9,009.20	229,900	+500	7,903.85	67,850	-21,040
Mar. 31........	9,009.12	229,700	-200	7,885.88	47,400	-20,450
Apr. 30........	9,008.97	229,200	-500	7,891.77	53,540	+6,140
May 31........	9,016.03	250,900	+21,700	7,909.11	74,800	+21,260
June 30........	9,018.22	258,100	+7,200	7,943.60	132,700	+57,900
July 31........	9,017.86	256,900	-1,200	7,948.01	141,700	+9,000
Aug. 31........	9,012.82	240,800	-16,100	7,947.71	141,100	-600
Sept. 30........	9,009.70	231,400	-9,400	7,943.77	133,000	-8,100
WTR YR 1985..	-	-	0	-	-	-3,400

a Computed on basis of revised capacity table put into use Oct. 1, 1984.

09057500 BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO

LOCATION.--Lat 39°52'49", long 106°20'00", in SW¼NE¼ sec.15, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, on left bank 0.3 mi upstream from Elliott Creek, 0.3 mi downstream from Green Mountain Dam, and 13 mi southeast of Kremmling.

DRAINAGE AREA.--599 mi^2, includes 15.3 mi^2 of Elliott Creek above diversion for Elliott Creek feeder canal.

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1943, published as Blue River below Green Mountain Reservoir, near Kremmling.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,682.66 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Oct. 1, 1951, water-stage recorder at site 3.7 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Green Mountain Reservoir since November 1942 (station 09057000).Diversions for irrigation of about 5,000 acres above station. Transmountain diversions above station (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft^3/s, June 4, 1938, gage height, 5.93 ft, site and datum then in use, from rating curve extended above 3,000 ft^3/s; maximum gage height, 9.52 ft, July 11, 1983; minimum daily discharge (prior to construction of Green Mountain Reservoir), 80 ft^3/s, Feb. 18-24, 1938, Feb. 18-19, 1940; no flow at times in 1943.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,740 ft^3/s at 1245 July 22, gage height, 7.46 ft; minimum daily, 8 ft^3/s, APR. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	418	600	513	575	567	99	520	832	1220	1050	631
2	304	425	601	523	566	568	15	518	834	1020	967	631
3	321	422	604	530	563	567	8.0	521	833	757	890	620
4	318	424	604	530	565	572	133	517	823	623	892	612
5	314	424	607	530	574	566	319	518	824	617	821	598
6	309	424	606	527	573	570	368	518	825	620	737	569
7	308	421	606	522	581	570	374	519	831	618	731	502
8	308	421	605	522	573	570	373	521	834	622	735	504
9	308	423	607	527	565	571	369	522	941	616	736	500
10	307	421	608	531	564	574	369	521	1030	617	737	502
11	355	419	606	519	568	567	367	514	1030	208	740	506
12	414	420	576	519	568	566	366	518	1020	669	735	500
13	410	419	526	518	565	571	371	688	1130	871	746	500
14	409	412	526	521	516	567	370	932	1230	872	744	556
15	416	411	529	520	518	573	372	914	1230	941	746	625
16	425	410	532	492	547	573	372	916	1230	1020	688	624
17	423	407	531	489	544	568	369	915	1320	1020	643	621
18	416	405	531	520	542	567	373	924	1430	1010	643	621
19	414	404	533	518	530	565	446	919	1430	1020	640	623
20	421	401	537	516	524	575	518	862	1500	1030	631	622
21	421	511	536	515	525	592	520	814	1540	1260	631	627
22	422	601	534	518	528	593	516	813	1530	1690	632	630
23	424	603	535	523	542	594	518	821	1530	1690	632	630
24	426	604	531	521	541	592	525	821	1520	1560	631	623
25	423	604	531	521	525	592	522	821	1510	1480	631	623
26	418	605	531	520	558	592	530	823	1520	1480	636	629
27	415	606	519	519	574	597	521	824	1520	1480	638	626
28	418	605	518	518	568	491	524	824	1510	1470	634	627
29	415	600	518	542	---	392	515	828	1510	1410	633	628
30	417	600	523	572	---	295	511	819	1360	1170	636	629
31	414	---	520	574	---	195	---	829	---	1050	638	---
TOTAL	11821	14270	17271	16230	15482	16912	11553.0	22334	36207	31731	22224	17739
MEAN	381	476	557	524	553	546	385	720	1207	1024	717	591
MAX	426	606	608	574	581	597	530	932	1540	1690	1050	631
MIN	304	401	518	489	516	195	8.0	514	823	208	631	500
AC-FT	23450	28300	34260	32190	30710	33540	22920	44300	71820	62940	44080	35190

CAL YR 1984 TOTAL 354736 MEAN 969 MAX 3040 MIN 304 AC-FT 703600
WTR YR 1985 TOTAL 233774.0 MEAN 640 MAX 1690 MIN 8.0 AC-FT 463700

09058000 COLORADO RIVER NEAR KREMMLING, CO

LOCATION.--Lat 40°02'12", long 106°26'22", in NE¼SW¼ sec.23, T.1 N., R.81 W., Grand County, Hydrologic Unit 14010001, on right bank at upstream end of Gore Canyon, 3.0 mi southwest of Kremmling, and 3.8 mi downstream from Blue River.

DRAINAGE AREA.--2,382 mi^2.

PERIOD OF RECORD.--July 1904 to September 1918 (published as Grand River near Kremmling), October 1961 to September 1970, October 1971 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,320 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1313 for history of changes prior to Oct. 1, 1961.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 40,000 acres above station, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 21,500 ft^3/s, June 7, 1912, gage height, 21.8 ft, datum then in use, from rating curve extended above 14,000 ft^3/s; minimum observed, 166 ft^3/s, Dec. 19, 1907.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,620 ft^3/s at 1900 May 11, gage height, 9.88 ft; minimum daily, 453 ft^3/s, Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	896	1050	1170	1030	854	845	542	1860	2600	1980	1720	875
2	888	1030	1130	950	773	855	433	2030	2640	1910	1640	847
3	899	988	1140	987	821	898	713	2280	2550	1710	1530	850
4	912	1020	1120	1000	849	877	1190	2540	2380	1410	1500	875
5	923	999	1110	991	817	884	994	2960	2290	1380	1470	851
6	971	999	1080	1030	873	863	951	3260	2270	1370	1360	814
7	990	1010	1070	1020	870	856	1140	3460	2270	1370	1330	714
8	947	998	1090	963	876	851	1330	3330	2400	1380	1310	698
9	939	961	1100	1000	883	854	1460	3260	2820	1260	1300	698
10	937	922	1100	1000	878	868	1390	3380	3390	1180	1290	692
11	904	954	1110	1010	871	865	1460	3540	3500	973	1280	702
12	952	996	1100	1010	871	864	1480	3460	3210	1100	1300	718
13	955	1030	1050	925	877	864	1480	3110	3020	1380	1300	712
14	1020	1030	1040	960	865	859	1480	3010	3020	1480	1280	712
15	1060	1100	1050	972	823	867	1590	2750	2890	1490	1260	795
16	1050	892	1040	990	872	885	1750	2770	2840	1610	1220	807
17	1020	946	1050	994	861	898	1860	2810	2810	1700	1150	807
18	1040	960	1040	1010	855	924	1940	2870	2810	1810	1140	803
19	955	934	1050	1020	841	976	2020	2950	2700	1980	1150	803
20	939	986	1050	1020	838	1090	1950	2960	2660	2040	1130	804
21	986	1000	1040	1030	834	1180	1800	2840	2620	2240	1110	819
22	1040	1110	1040	1020	856	1160	1730	2760	2490	2570	1110	828
23	1080	1100	1060	1020	875	1040	1630	2700	2420	2510	1100	839
24	1050	1110	1030	963	853	1040	1620	2650	2370	2430	1090	845
25	995	1120	1030	984	865	1180	1610	2680	2440	2250	1060	841
26	1040	1110	1050	1000	859	1260	1600	2730	2400	2180	1040	837
27	985	1090	1030	1000	876	1080	1550	2800	2380	2150	1050	831
28	1020	1120	1030	1010	903	933	1580	2780	2330	2130	1060	853
29	1030	1150	1020	1010	---	814	1720	2830	2280	2100	1060	891
30	1000	1170	1030	1040	---	700	1770	2760	2210	1950	1050	894
31	931	---	1040	1050	---	623	---	2640	---	1770	1030	---
TOTAL	30354	30885	33090	31009	23989	28753	43763	88760	79010	54793	38420	24055
MEAN	979	1030	1067	1000	857	928	1459	2863	2634	1768	1239	802
MAX	1080	1170	1170	1050	903	1260	2020	3540	3500	2570	1720	894
MIN	888	892	1020	925	773	623	433	1860	2210	973	1030	692
AC-FT	60210	61260	65630	61510	47580	57030	86800	176100	156700	108700	76210	47710

CAL YR 1984 TOTAL 893562 MEAN 2441 MAX 12700 MIN 553 AC-FT 1772000
WTR YR 1985 TOTAL 506881 MEAN 1389 MAX 3540 MIN 433 AC-FT 1005000

09058030 COLORADO RIVER NEAR RADIUM, COLORADO

LOCATION.--Lat 39°58'01", long 106°31'22", in NW¼NW¼ sec.24, T.1 S., R.82 W., Grand County, Hydrologic Unit 14010001, on left bank, 1.0 mi upstream from Blacktail Creek, 2.0 mi northeast of Radium, and 3.0 mi downstream from Canyon Creek.

DRAINAGE AREA.--2,412 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,910 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 27 to Mar. 29. Records good, except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 40,000 acres above station, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft^3/s, probably occurred on May 26, 1984, gage height, 12.91 ft, from highwater mark in well; minimum daily, 370 ft^3/s, Dec. 23-25, 1981.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 3,790 ft^3/s at 1900 May 11, gage height, 6.59 ft; minimum daily, 650 ft^3/s, Apr. 1-2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	898	1040	1210	1050	900	860	650	2000	2690	2040	1770	896
2	889	1020	1160	949	800	860	650	2150	2750	1950	1700	868
3	894	984	1160	993	830	900	751	2390	2600	1660	1590	875
4	912	1010	1160	1050	860	900	1240	2660	2450	1490	1560	899
5	925	997	1140	1040	830	900	1080	3110	2350	1450	1520	878
6	966	993	1130	1080	900	900	1040	3440	2330	1430	1420	843
7	993	1010	1140	1070	900	900	1230	3650	2330	1430	1380	732
8	948	1000	1130	1010	900	900	1430	3490	2430	1440	1370	717
9	934	970	1150	1040	900	880	1580	3430	2860	1320	1360	724
10	930	925	1150	1050	900	880	1550	3570	3490	1230	1350	714
11	894	948	1160	1040	900	890	1590	3720	3640	1040	1340	731
12	934	993	1150	1050	900	900	1630	3620	3350	1110	1360	738
13	948	1020	1090	944	900	900	1640	3260	3120	1450	1360	735
14	996	1030	1080	1020	900	900	1630	3160	3130	1550	1350	731
15	1050	1110	1070	1060	860	900	1730	2880	2980	1560	1320	821
16	1050	905	1090	1090	900	920	1880	2900	2930	1680	1280	826
17	1020	925	1100	1080	900	940	1970	2960	2880	1760	1200	819
18	1040	970	1070	1060	900	980	2030	3020	2900	1860	1210	817
19	967	934	1090	1060	880	1010	2130	3090	2760	2020	1210	811
20	934	982	1090	1070	880	1150	2090	3100	2710	2110	1190	808
21	975	1000	1080	1100	880	1230	1940	2980	2660	2260	1170	822
22	1030	1120	1060	1090	900	1220	1880	2920	2510	2620	1150	836
23	1070	1110	1080	1080	900	1100	1880	2840	2440	2560	1150	843
24	1060	1120	1080	1020	900	1100	1740	2770	2380	2500	1130	850
25	989	1130	1050	1090	900	1260	1750	2800	2470	2290	1090	846
26	1030	1120	1090	1140	900	1300	1740	2870	2470	2230	1080	839
27	980	1100	1080	1140	900	1200	1690	2930	2450	2190	1080	832
28	1020	1140	1070	1100	900	1000	1710	2910	2390	2180	1090	860
29	1020	1170	1070	1080	---	871	1840	2950	2330	2160	1100	894
30	1000	1190	1070	1080	---	774	1910	2870	2270	2000	1090	890
31	926	---	1080	1100	---	690	---	2750	---	1820	1070	---
TOTAL	30222	30966	34330	32826	24820	30115	47601	93190	81050	56390	40040	24495
MEAN	975	1032	1107	1059	886	971	1587	3006	2702	1819	1292	817
MAX	1070	1190	1210	1140	900	1300	2130	3720	3640	2620	1770	899
MIN	889	905	1050	944	800	690	650	2000	2270	1040	1070	714
AC-FT	59950	61420	68090	65110	49230	59730	94420	184800	160800	111800	79420	48590

CAL YR 1984 TOTAL 905727 MEAN 2475 MAX 13000 MIN 600 AC-FT 1797000
WTR YR 1985 TOTAL 526045 MEAN 1441 MAX 3720 MIN 650 AC-FT 1043000

NOTE.--NO GAGE-HEIGHT RECORD JAN. 27 TO MAR. 29.

COLORADO RIVER MAIN STEM

09058030 COLORADO RIVER NEAR RADIUM, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1981 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)
OCT 24...	11:00	1020	187	8.4	5.0	4.4	10.6	K5	21
NOV 20...	11:00	940	173	8.3	0.5	4.6	12.2	K4	22
APR 25...	16:15	1730	228	8.1	6.0	37	9.5	K12	32
MAY 21...	12:45	3060	178	7.8	9.5	31	9.1	K34	25
JUN 25...	17:00	2540	220	7.7	16.0	8.7	8.8	65	24
JUL 31...	16:00	1800	210	7.7	15.5	6.3	8.8	31	23
AUG 21...	13:00	1120	195	8.4	15.5	4.1	8.8	K7	29
SEP 12...	11:00	722	220	8.3	11.5	2.7	8.8	22	30

DATE	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
OCT 24...	4.7	7.5	1.4	60	<0.5	29	2.2	103	3
NOV 20...	4.4	7.0	1.3	57	--	26	2.0	101	4
APR 25...	11	12	2.2	99	<0.5	36	2.5	149	98
MAY 21...	7.3	--	1.3	58	<0.5	27	1.4	103	105
JUN 25...	6.0	14	2.0	64	--	35	1.9	125	39
JUL 31...	5.5	6.9	1.8	63	<0.5	28	1.8	117	11
AUG 21...	5.8	6.2	1.7	57	<0.5	31	1.8	119	6
SEP 12...	5.0	8.0	2.1	99	4.8	34	2.3	140	10

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CYANIDE TOTAL (MG/L AS CN)	ALGAL GROWTH POTEN-TIAL, BOTTLE TEST (MG/L)
OCT 24...	<0.01	<0.10	0.4	--	0.02	0.02	<0.01	--
NOV 20...	<0.01	<0.10	<0.2	--	0.01	0.02	--	15
APR 25...	<0.01	0.20	1.0	1.2	0.12	0.02	<0.01	25
MAY 21...	0.03	0.40	0.5	0.9	0.11	0.03	<0.01	--
JUN 25...	<0.01	<0.10	0.3	--	0.04	0.01	<0.01	3.1
JUL 31...	<0.01	0.10	0.5	0.6	0.04	0.01	<0.01	--
AUG 21...	<0.01	<0.10	0.3	--	0.02	<0.01	<0.01	--
SEP 12...	<0.01	0.10	0.2	0.3	0.02	<0.01	<0.01	7.1

K BASED ON NON-IDEAL COLONY COUNT.

09058030 COLORADO RIVER NEAR RADIUM, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 24...	11:00	<1	40	<1	3	3	370	130
NOV 20...	11:00	<1	20	<1	8	3	360	90
APR 25...	16:15	1	30	2	9	4	2500	70
MAY 21...	12:45	<1	10	<1	5	7	670	110
JUN 25...	17:00	1	30	<1	3	3	850	80
JUL 31...	16:00	1	10	<1	10	5	640	50
AUG 21...	13:00	<1	30	<1	1	1	370	60
SEP 12...	11:00	<1	40	1	3	2	210	40

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)
OCT 24...	3	40	20	<0.1	5	<1	<1
NOV 20...	<1	40	20	0.2	21	<1	<1
APR 25...	6	90	20	<0.1	3	<1	<1
MAY 21...	<1	40	10	1.0	6	<1	<1
JUN 25...	2	60	20	<0.1	12	<1	<1
JUL 31...	1	50	20	<0.1	31	<1	<1
AUG 21...	<1	50	10	0.1	5	<1	<1
SEP 12...	4	40	20	<0.1	6	<1	<1

09058500 PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO

LOCATION.--Lat 39°42'29", long 106°25'34", Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from Dickson Creek, 2.0 mi downstream from Piney Lake, and 8.5 mi north of Minturn.

DRAINAGE AREA.--13.0 mi^2.

PERIOD OF RECORD.--October 1947 to September 1954, October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 9,145.25 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to October 1963, water-stage recorder at site 15 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Nov. 4-5, 9-11, 15-18, 20-28, Dec. 27 to Apr. 26. Records good except for estimated daily discharges, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--29 years (1948-54, 1964-85), 25.2 ft^3/s; 18,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 560 ft^3/s, June 8, 1985, gage height, 5.12 ft; maximum gage height observed, 6.44 ft, Apr. 13, 1977; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 29	0400	214	4.43	July 21	0800	192	4.30
June 8	2400	*560	*5.12				

Minimum daily discharge, 2.3 ft^3/s, Feb. 28 to Mar. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	9.9	7.0	3.5	3.8	2.3	2.8	50	64	55	24	3.9
2	14	10	6.8	3.0	3.6	2.3	2.8	71	64	66	23	4.4
3	13	9.9	6.2	3.1	3.7	2.3	3.0	106	101	66	21	4.9
4	14	9.6	5.9	3.2	3.7	2.3	3.0	116	106	66	18	6.3
5	21	9.2	5.6	3.5	3.5	2.3	2.9	122	128	75	16	6.6
6	25	9.0	4.4	3.7	3.5	2.3	2.9	111	185	71	15	5.6
7	25	8.5	4.2	3.8	3.5	2.3	3.5	101	218	66	13	5.0
8	21	8.2	4.5	3.8	3.3	2.3	4.0	111	347	58	11	5.0
9	19	8.2	3.9	3.7	3.4	2.3	5.0	116	362	53	10	5.0
10	18	8.0	3.7	3.6	3.4	2.5	6.0	106	270	51	9.9	4.8
11	17	8.0	3.7	3.6	3.5	3.0	7.0	96	172	45	9.9	4.5
12	16	7.8	3.9	3.5	3.3	2.7	8.0	62	152	45	14	5.0
13	17	8.6	3.9	3.5	3.3	2.6	9.0	42	163	58	12	5.3
14	18	8.2	3.9	3.6	3.3	2.5	10	35	174	45	9.7	4.8
15	17	8.2	3.7	3.5	3.3	2.6	20	35	175	35	8.7	4.8
16	15	7.8	3.7	3.5	3.1	2.6	30	39	188	32	7.7	6.6
17	15	8.2	3.7	3.5	2.9	2.6	40	46	172	29	6.9	5.8
18	15	8.4	3.7	3.5	3.0	2.7	50	56	167	45	6.4	5.0
19	15	8.7	3.7	3.5	2.8	2.7	56	60	127	62	6.1	4.8
20	14	8.4	3.4	3.5	2.8	2.7	48	48	135	106	6.0	4.5
21	13	8.0	3.7	3.7	2.8	2.7	40	43	154	142	5.6	4.2
22	12	8.2	3.4	3.9	2.8	2.7	34	46	142	109	5.6	5.6
23	12	8.2	3.6	4.1	2.8	2.7	26	64	104	75	5.3	6.3
24	12	8.6	3.7	4.0	2.6	2.7	24	103	95	84	5.0	6.1
25	13	8.6	3.7	4.0	2.6	2.7	20	140	148	67	4.6	5.6
26	11	8.2	3.7	4.0	2.6	2.8	18	109	107	56	4.5	5.0
27	12	7.4	3.9	4.0	2.4	2.9	16	122	60	56	4.5	5.8
28	11	7.4	3.7	4.0	2.3	2.8	24	161	55	39	4.6	8.5
29	10	7.3	3.7	4.0	---	2.9	29	175	65	32	4.5	9.5
30	9.9	7.2	3.8	3.6	---	2.8	35	130	63	32	4.5	7.5
31	9.9	---	3.8	3.8	---	2.8	---	91	---	27	4.2	---
TOTAL	468.8	251.9	130.2	113.2	87.6	80.4	579.9	2713	4463	1848	301.4	166.7
MEAN	15.1	8.40	4.20	3.65	3.13	2.59	19.3	87.5	149	59.6	9.72	5.56
MAX	25	10	7.0	4.1	3.8	3.0	56	175	362	142	24	9.5
MIN	9.9	7.2	3.4	3.0	2.3	2.3	2.8	35	55	27	4.2	3.9
AC-FT	930	500	258	225	174	159	1150	5380	8850	3670	598	331

CAL YR 1984 TOTAL 15460.5 MEAN 42.2 MAX 346 MIN 1.5 AC-FT 30670
WTR YR 1985 TOTAL 11204.1 MEAN 30.7 MAX 362 MIN 2.3 AC-FT 22220

09058610 DICKSON CREEK NEAR VAIL, CO

LOCATION.--Lat 39°42'14", long 106°27'25", Eagle County, Hydrologic Unit 14010001, on right bank 0.6 mi upstream from Freeman Creek, 1.0 mi upstream from mouth, and 6 mi northwest of Vail.

DRAINAGE AREA.--3.41 mi².

PERIOD OF RECORD.--October 1971 to current year. Prior to October 1972, published as "near Minturn."

GAGE.--Water-stage recorder. Elevation of gage is 9,245 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 3-31, Nov. 8, 9, 13-15, Nov. 20 to Apr. 25. Records good except for estimated daily discharges, which are poor. Diversion by Willy N. ditch 75 ft upstream of station for irrigation of hay meadows below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--14 years, 2.78 ft³/s; 1,710 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48 ft³/s, May 6, 1979, gage height, 2.75 ft; maximum gage height 4.89 ft, May 9, 1984 (backwater from ice); no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15 ft³/s at 1800 May 29, gage height, 2.66 ft; minimum daily, 0.82 ft³/s, Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.9	1.3	1.1	.82	1.3	1.5	3.5	11	4.4	2.2	1.6
2	1.7	1.9	1.3	1.0	.88	1.2	1.6	4.2	11	4.2	2.3	1.7
3	1.7	1.8	1.4	1.0	.92	1.1	1.6	5.2	11	4.0	2.2	1.6
4	1.7	1.7	1.4	1.0	.94	1.0	1.5	6.4	11	3.8	2.1	1.9
5	1.9	1.9	1.4	1.1	.94	1.1	1.6	7.2	10	3.7	2.1	1.6
6	2.1	1.8	1.5	1.1	.98	1.2	1.8	6.7	11	3.6	2.2	1.5
7	2.0	1.7	1.5	1.1	1.0	1.1	1.9	6.9	11	3.6	1.9	1.7
8	1.9	1.7	1.4	1.1	1.1	1.0	1.7	7.9	12	3.5	1.9	1.6
9	1.8	1.7	1.5	1.2	1.0	1.1	1.6	7.5	12	3.5	1.9	1.7
10	1.8	1.7	1.5	1.1	.98	1.2	1.6	8.9	12	3.3	1.9	1.6
11	1.7	1.7	1.5	1.1	.96	1.3	1.9	8.6	10	3.2	1.9	1.8
12	1.7	1.7	1.4	1.1	1.0	1.2	1.9	8.2	8.6	3.1	2.1	1.9
13	1.8	1.6	1.5	1.0	1.1	1.1	1.9	7.2	8.2	3.2	1.9	1.7
14	1.8	1.6	1.4	1.0	1.1	1.2	2.0	6.9	7.9	3.1	1.8	1.7
15	1.6	1.5	1.4	1.1	1.1	1.3	2.1	7.0	7.5	3.0	1.8	1.8
16	2.1	1.4	1.3	1.1	1.1	1.3	2.0	7.2	6.9	3.0	1.7	1.7
17	2.1	1.4	1.3	1.1	1.1	1.3	2.1	7.5	6.9	2.8	1.7	1.7
18	1.9	1.3	1.4	1.2	1.2	1.3	2.0	7.9	6.7	3.2	1.7	1.7
19	1.6	1.3	1.5	1.2	1.2	1.3	1.7	8.2	6.2	3.2	1.7	1.7
20	1.5	1.3	1.4	1.1	1.1	1.3	1.6	8.2	5.9	3.2	1.7	1.7
21	1.5	1.3	1.3	1.1	1.1	1.2	1.6	8.6	5.9	3.5	1.7	1.7
22	1.5	1.3	1.4	1.1	1.2	1.2	1.7	8.2	5.9	2.9	1.7	1.8
23	1.6	1.4	1.4	1.0	1.2	1.3	1.8	8.9	5.7	2.8	1.7	1.9
24	1.7	1.5	1.3	1.0	1.2	1.5	1.9	9.3	5.9	3.2	1.7	1.8
25	2.0	1.5	1.2	1.1	1.2	1.5	1.8	10	6.2	2.6	1.7	1.8
26	2.0	1.5	1.3	1.0	1.2	1.3	1.8	11	5.9	2.4	1.7	1.9
27	1.9	1.4	1.2	1.1	1.2	1.2	2.0	12	5.7	2.3	1.6	1.8
28	2.2	1.5	1.3	1.0	1.2	1.2	2.3	13	5.2	2.3	1.6	2.0
29	2.1	1.4	1.2	.92	---	1.2	2.3	14	4.8	2.4	1.6	1.8
30	2.0	1.4	1.2	.86	---	1.3	2.7	14	4.6	2.5	1.5	1.7
31	2.0	---	1.2	.84	---	1.4	---	12	---	2.2	1.5	---
TOTAL	56.6	46.8	42.3	32.82	30.02	38.2	55.5	262.3	242.6	97.7	56.7	52.1
MEAN	1.83	1.56	1.36	1.06	1.07	1.23	1.85	8.46	8.09	3.15	1.83	1.74
MAX	2.2	1.9	1.5	1.2	1.2	1.5	2.7	14	12	4.4	2.3	2.0
MIN	1.5	1.3	1.2	.84	.82	1.0	1.5	3.5	4.6	2.2	1.5	1.5
AC-FT	112	93	84	65	60	76	110	520	481	194	112	103

CAL YR 1984 TOTAL 907.60 MEAN 2.48 MAX 20 MIN .00 AC-FT 1800
WTR YR 1985 TOTAL 1013.64 MEAN 2.78 MAX 14 MIN .82 AC-FT 2010

09058700 FREEMAN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°41'54", long 106°26'42", Eagle County, Hydrologic Unit 14010001, on right bank 0.8 mi upstream from mouth and 7.5 mi north of Minturn.

DRAINAGE AREA.--2.94 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,335 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 22-31, Nov. 1 - Apr. 27. Records fair except for estimated daily discharges, which are poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 1.43 ft^3/s; 1,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 82 ft^3/s May 25, 1984, gage height, 2.21 ft; maximum gage height, 3.51 ft, May 18, 1973 (backwater from ice); no flow for some days some years.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 25 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 8	1400	*35	2.09	May 27	1700	*35	*2.12

Minimum daily discharge, 0.11 ft^3/s, Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	.64	.31	.26	.18	.19	.37	3.3	16	1.8	.65	.38
2	.77	.60	.32	.23	.16	.19	.38	5.3	13	1.7	.67	.63
3	.65	.57	.29	.21	.15	.19	.40	9.7	12	1.6	.57	.63
4	.78	.53	.27	.17	.18	.20	.45	13	11	1.6	.50	.66
5	1.2	.55	.27	.12	.18	.20	.50	18	11	1.4	.48	.37
6	1.1	.56	.25	.13	.18	.20	.46	20	12	1.3	.52	.26
7	.93	.51	.24	.13	.18	.20	.45	22	12	1.2	.47	.29
8	.64	.50	.26	.18	.18	.20	.48	24	13	1.2	.40	.28
9	.75	.48	.27	.20	.17	.21	.50	20	12	1.1	.30	.25
10	.74	.47	.27	.21	.16	.22	.62	23	13	1.1	.29	.20
11	.72	.46	.27	.21	.14	.25	.82	17	9.4	.97	.43	.24
12	.73	.42	.27	.20	.17	.27	.81	11	7.8	1.1	.88	.35
13	.91	.45	.26	.19	.18	.28	.86	8.0	6.7	.99	.48	.13
14	.92	.48	.23	.19	.19	.26	.98	7.0	5.9	.89	.40	.11
15	.78	.46	.22	.20	.19	.24	1.1	7.8	5.4	.81	.36	.22
16	.78	.43	.27	.21	.19	.24	1.3	8.6	4.9	.80	.29	.25
17	.77	.43	.27	.21	.19	.25	1.5	12	4.6	.80	.23	.17
18	.73	.43	.25	.20	.19	.25	1.7	14	4.2	1.3	.27	.17
19	.73	.43	.25	.20	.20	.26	1.9	14	3.7	1.2	.26	.21
20	.73	.42	.26	.19	.21	.26	2.1	12	2.9	1.5	.20	.19
21	.71	.41	.27	.19	.20	.26	2.0	13	2.8	1.9	.22	.21
22	.69	.40	.26	.20	.19	.26	1.9	14	2.5	1.9	.21	.47
23	.80	.37	.25	.21	.19	.27	1.8	18	2.3	1.4	.18	.40
24	.73	.37	.24	.20	.19	.28	1.6	18	2.6	1.7	.13	.35
25	.74	.38	.21	.19	.19	.28	1.5	21	4.0	1.3	.16	.35
26	.81	.37	.23	.19	.19	.30	1.5	24	3.5	1.1	.20	.42
27	.79	.37	.25	.18	.19	.32	1.5	25	2.9	.91	.23	.46
28	.76	.34	.26	.18	.19	.34	1.4	25	2.3	.80	.29	.92
29	.72	.29	.25	.19	---	.33	1.6	25	2.1	.79	.31	.68
30	.70	.29	.23	.19	---	.36	2.0	22	2.0	.94	.30	.54
31	.67	---	.24	.19	---	.39	---	18	---	.69	.27	---
TOTAL	24.16	13.41	7.99	5.95	5.10	7.95	34.48	492.7	207.5	37.79	11.15	10.79
MEAN	.78	.45	.26	.19	.18	.26	1.15	15.9	6.92	1.22	.36	.36
MAX	1.2	.64	.32	.26	.21	.39	2.1	25	16	1.9	.88	.92
MIN	.64	.29	.21	.12	.14	.19	.37	3.3	2.0	.69	.13	.11
AC-FT	48	27	16	12	10	16	68	977	412	75	22	21

CAL YR 1984 TOTAL 1324.20 MEAN 3.62 MAX 63 MIN .05 AC-FT 2630
WTR YR 1985 TOTAL 858.97 MEAN 2.35 MAX 25 MIN .11 AC-FT 1700

09058800 EAST MEADOW CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°43'54", long 106°25'34", Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from mouth and 10 mi north of Minturn.

DRAINAGE AREA.--3.61 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,455 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 14 to Apr. 24, June 21 to July 16. Records fair except for estimated daily discharges, which are poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 4.51 ft^3/s; 3,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81 ft^3/s, June 30, 1984, gage height, 1.71 ft, but may have been higher during period of no gage height record May 11 to June 26, 1984; maximum gage height, 2.22 ft, May 12, 1970 (backwater from ice); minimum daily discharge, 0.32 ft^3/s, Jan. 7, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 62 ft^3/s at 1800 June 8, gage height, 1.71 ft; minimum daily, 0.50 ft^3/s, Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.3	1.5	1.3	.90	.70	1.2	4.4	22	7.0	3.7	1.0
2	2.7	2.3	1.5	.90	.90	.70	1.2	5.8	22	6.5	3.7	1.3
3	2.6	2.2	1.4	.50	.80	.70	1.4	8.1	22	6.0	3.4	1.3
4	2.7	2.3	1.4	.60	.90	.70	1.4	9.8	22	5.5	3.0	1.6
5	4.6	2.2	1.4	.90	.90	.70	1.3	11	23	5.0	2.9	1.0
6	4.1	2.2	1.3	1.1	.80	.70	1.3	11	27	4.5	2.6	.95
7	3.2	2.2	1.4	1.2	.80	.70	1.4	12	31	5.0	2.3	.95
8	2.9	2.0	1.4	1.2	.80	.70	1.5	14	40	4.8	2.1	1.0
9	2.7	2.0	1.4	1.2	.70	.70	1.8	14	40	4.6	2.0	.95
10	2.7	2.0	1.4	1.1	.80	.90	1.9	16	38	4.4	1.9	.88
11	2.7	1.9	1.3	1.0	.80	1.4	2.3	14	30	4.2	2.0	.95
12	2.7	2.1	1.4	1.0	.90	1.1	2.7	11	28	4.1	3.0	1.4
13	2.9	2.1	1.1	.90	.80	1.0	3.0	8.9	27	4.0	2.3	1.0
14	2.7	1.9	1.4	.90	.80	.90	3.2	8.9	25	3.9	2.3	.95
15	2.9	2.0	1.5	1.0	.80	1.0	3.4	9.4	25	3.8	1.9	1.2
16	2.8	1.9	1.4	.90	.80	1.0	3.6	9.8	25	3.7	1.9	1.2
17	2.7	1.9	1.4	.90	.80	1.0	3.8	11	24	3.5	1.8	1.0
18	2.5	1.9	1.2	.90	.70	1.1	4.1	12	22	5.8	1.8	.95
19	2.4	1.8	1.5	.90	.80	1.1	4.3	12	21	7.2	1.7	.95
20	2.4	1.8	1.4	.90	.80	1.1	3.9	11	20	8.1	1.6	1.0
21	2.5	1.7	1.3	1.0	.80	1.1	3.5	11	19	12	1.3	1.0
22	2.4	1.7	1.3	.90	.70	1.1	3.1	12	16	8.6	1.2	1.4
23	2.4	1.8	1.2	.80	.70	1.1	2.5	14	12	6.5	1.2	1.5
24	2.5	1.7	1.0	.90	.70	1.1	2.1	16	10	8.1	1.1	1.5
25	2.3	1.7	1.2	.90	.70	1.1	1.9	17	10	6.5	1.1	1.4
26	2.2	1.7	1.2	.90	.70	1.2	1.9	19	9.5	6.5	1.0	1.6
27	2.2	1.4	1.2	.90	.70	1.3	2.1	21	9.0	5.8	1.0	1.8
28	2.3	1.3	1.4	.90	.70	1.2	3.0	24	8.5	4.6	1.1	1.9
29	2.3	1.5	1.2	.90	---	1.3	3.0	27	8.0	4.4	1.0	1.9
30	2.3	1.6	1.2	.90	---	1.2	3.4	25	7.5	4.4	1.0	1.8
31	2.3	---	1.3	.60	---	1.2	---	22	---	3.9	1.0	---
TOTAL	83.2	57.1	41.2	28.90	22.00	30.80	75.2	422.1	643.5	172.9	59.9	37.33
MEAN	2.68	1.90	1.33	.93	.79	.99	2.51	13.6	21.4	5.58	1.93	1.24
MAX	4.6	2.3	1.5	1.3	.90	1.4	4.3	27	40	12	3.7	1.9
MIN	2.2	1.3	1.0	.50	.70	.70	1.2	4.4	7.5	3.5	1.0	.88
AC-FT	165	113	82	57	44	61	149	837	1280	343	119	74

CAL YR 1984 TOTAL 2121.21 MEAN 5.80 MAX 46 MIN .50 AC-FT 4210
WTR YR 1985 TOTAL 1674.13 MEAN 4.59 MAX 40 MIN .50 AC-FT 3320

09059500 PINEY RIVER NEAR STATE BRIDGE, CO

LOCATION.--Lat 39°48'00", long 106°35'00", in SW¼NE¼ sec.16, T.3 S., R.82 W., Eagle County, Hydrologic Unit 14010001, on left bank at downstream side of private bridge at Perry Olsen Ranch 1.2 mi downstream from Rock Creek, and 6.0 mi southeast of State Bridge.

DRAINAGE AREA.--86.2 mi^2.

PERIOD OF RECORD.--May 1944 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,272.35 ft above National Geodetic Vertical Datum of 1929. Prior to July 29, 1944, nonrecording gage, and July 29, 1944, to Oct. 24, 1947, water-stage recorder, at datum 2.38 ft, higher.

REMARKS.--Estimated daily discharges: Oct. 1 to Aug. 9. Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 400 acres of hay meadows above and below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--41 years, 77.0 ft^3/s; 55,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,300 ft^3/s, May 25, 1984 (occured during a period of no gage-height record); maximum recorded discharge, 1,220 ft^3/s, June 27, 1983, gage height, 5.82 ft, (from peak stage indicator), but may have been higher May 25, 1984; minimum daily, 1.9 ft^3/s, Sept. 1, 18, 19, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 520 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 11	unknown	unknown	unknown	May 30	unknown	unknown	unknown
June 9	unknown	a1,020	unknown				

a-Maximum daily discharge.
Minimum daily discharge 12 ft^3/s, Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	40	29	20	14	17	19	200	460	140	55	23
2	41	39	27	15	13	18	23	230	410	130	52	23
3	42	40	24	12	13	18	27	260	420	130	49	23
4	43	40	25	15	14	16	28	300	510	130	48	30
5	45	39	24	17	14	15	23	330	600	130	46	29
6	49	39	21	19	14	17	23	300	710	130	46	24
7	52	39	22	21	13	18	26	260	810	110	46	23
8	52	37	25	24	14	18	32	300	910	105	46	23
9	52	36	28	22	16	18	40	430	1020	98	46	23
10	50	35	27	22	15	20	37	500	820	96	43	23
11	48	36	28	21	14	38	60	510	580	92	41	22
12	47	38	28	19	15	26	88	520	470	88	54	25
13	47	36	26	15	16	22	120	420	470	110	44	25
14	47	36	24	14	15	21	160	380	460	105	38	23
15	49	35	25	14	15	22	170	290	450	90	36	23
16	47	35	26	15	15	25	200	250	450	81	33	24
17	46	35	25	17	15	24	210	260	440	76	32	25
18	43	34	22	19	14	25	230	270	400	72	31	24
19	42	32	27	20	14	25	200	280	380	79	31	24
20	43	30	23	20	15	26	170	290	330	90	31	22
21	43	28	23	19	16	25	140	270	320	120	28	22
22	42	29	19	15	17	23	120	290	300	150	27	26
23	43	30	18	13	17	20	110	340	270	140	25	29
24	42	30	25	13	16	19	105	480	250	120	25	29
25	40	32	22	13	18	22	100	440	290	100	25	27
26	39	30	25	14	17	24	110	460	250	88	24	26
27	40	27	27	16	16	23	95	510	210	79	24	25
28	40	28	26	17	18	22	120	560	180	72	24	35
29	40	30	25	16	---	21	150	580	170	65	24	41
30	40	29	23	15	---	19	170	600	170	61	23	32
31	40	---	25	14	---	19	---	550	---	58	23	---
TOTAL	1375	1024	764	526	423	666	3106	11660	13510	3135	1120	773
MEAN	44.4	34.1	24.6	17.0	15.1	21.5	104	376	450	101	36.1	25.8
MAX	52	40	29	24	18	38	230	600	1020	150	55	41
MIN	39	27	18	12	13	15	19	200	170	58	23	22
AC-FT	2730	2030	1520	1040	839	1320	6160	23130	26800	6220	2220	1530

CAL YR 1984 TOTAL 47247.0 MEAN 129 MAX 1300 MIN 8.5 AC-FT 93710
WTR YR 1985 TOTAL 38082 MEAN 104 MAX 1020 MIN 12 AC-FT 75540

09060550 ROCK CREEK AT CRATER, CO

LOCATION.--Lat 39°58'42", long 106°42'34", in NW¼NE¼ sec. 17, T.1 S., R.83 W., Routt County, Hydrologic Unit 14010001, on right bank 250 ft downstream from county bridge crossing, 2 miles below Kayser Mutual Ditch diversion and 0.8 miles northwest of Crater, Colorado.

DRAINAGE AREA.--72.6 mi^2.

PERIOD OF RECORD.--October 1984 to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 7,185 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to Dec. 12, May 7-14. Records fair except for periods of estimated daily discharges, which are poor. Diversions for irrigation of approximately 1,025 acres above station. Several observations of specific conductance and water temperature were obtained and published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 422 ft^3/s, May 6, 1985, gage height, 3.97 ft, but may have been higher during period of no gage-height record May 7-14, 1985; minimum daily, 6.1 ft^3/s, Sept. 18-19, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 422 ft^3/s at 0400 May 6, gage height, 3.97 ft, but may have been higher during period of no gage-height record May 7-14; minimum daily, 6.1 ft^3/s, Sept. 18-19, 1985.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	17	13	14	14	12	16	147	211	24	11	7.0
2	18	18	14	13	13	12	16	160	199	24	10	6.9
3	18	19	14	14	13	12	17	188	188	24	11	8.4
4	19	17	14	14	13	12	17	236	183	20	10	7.9
5	20	16	15	14	13	12	17	362	171	17	9.9	7.3
6	21	17	15	14	13	13	18	395	161	16	9.3	6.9
7	18	18	15	14	13	12	20	330	158	15	9.3	6.8
8	17	17	14	14	13	12	22	320	144	15	9.1	6.8
9	17	16	14	14	12	13	25	360	132	15	8.8	6.8
10	17	15	15	14	12	13	29	410	123	14	8.7	6.8
11	17	17	14	14	12	13	38	380	97	14	8.2	6.7
12	18	16	14	14	12	13	50	300	86	18	15	8.1
13	17	16	14	14	13	13	62	270	78	21	12	7.1
14	18	15	14	14	13	13	73	230	66	16	9.1	6.6
15	18	16	14	14	13	14	102	216	57	13	8.4	6.4
16	18	16	14	14	13	14	137	212	51	15	8.1	6.3
17	18	17	14	14	13	15	153	218	51	13	7.7	6.3
18	17	15	14	14	13	15	175	220	40	19	7.6	6.1
19	17	15	14	14	13	15	135	242	39	37	8.6	6.1
20	18	15	14	14	13	15	87	237	36	37	8.4	6.2
21	18	16	14	14	13	16	69	236	35	35	8.1	6.3
22	18	16	14	14	13	15	58	232	27	21	8.1	7.0
23	17	16	14	14	13	16	51	235	23	23	8.1	8.0
24	17	15	14	14	13	15	56	245	24	39	7.5	7.4
25	17	15	14	14	13	16	54	253	44	25	7.1	7.1
26	18	14	14	14	12	16	48	260	44	18	7.0	6.9
27	18	14	14	14	12	16	48	255	40	17	6.9	7.1
28	17	14	14	14	12	16	73	260	31	14	6.9	7.4
29	18	14	14	14	---	16	91	251	26	14	7.1	8.1
30	18	14	14	13	---	16	112	232	25	17	7.2	6.9
31	17	---	14	13	---	16	---	218	---	13	7.0	---
TOTAL	552	476	437	431	358	437	1869	8110	2590	623	271.2	209.7
MEAN	17.8	15.9	14.1	13.9	12.8	14.1	62.3	262	86.3	20.1	8.75	6.99
MAX	21	19	15	14	14	16	175	410	211	39	15	8.4
MIN	17	14	13	13	12	12	16	147	23	13	6.9	6.1
AC-FT	1090	944	867	855	710	867	3710	16090	5140	1240	538	416

WTR YR 1985 TOTAL 16363.9 MEAN 44.8 MAX 410 MIN 6.1 AC-FT 32460

ROCK CREEK BASIN

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- December 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
DEC 12...	1100	14	122	8.0	.5	12.0	61	18	3.8	3.4
JAN 22...	1400	14	134	8.2	.0	12.3	72	22	4.1	3.7
FEB 20...	1400	13	132	8.1	.0	12.2	79	25	3.9	3.6
MAR 19...	1400	15	135	8.4	1.5	11.7	67	20	4.1	3.6
APR 16...	1200	142	90	8.2	4.0	11.1	45	13	2.9	2.4
MAY 14...	1200	204	77	8.1	4.0	11.1	34	10	2.2	2.8
JUN 12...	1300	96	75	8.1	10.5	9.5	32	9.8	1.9	2.5
JUL 16...	1100	13	138	8.2	12.0	8.8	64	19	3.9	3.5
AUG 20...	1200	7.9	154	8.6	10.5	9.0	70	21	4.3	3.7
SEP 18...	1100	6.3	160	8.2	9.0	9.6	79	24	4.6	4.1

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
DEC 12...	.2	.90	58	12	.60	<.10	14	88	.12	3.3
JAN 22...	.2	.80	57	10	.70	.10	15	91	.12	3.4
FEB 20...	.2	1.1	57	11	.80	.10	14	94	.13	3.3
MAR 19...	.2	1.4	57	10	1.1	.10	15	90	.12	3.6
APR 16...	.2	1.5	35	11	1.1	<.10	11	64	.09	25
MAY 14...	.2	.60	29	9.7	.60	<.10	12	55	.08	31
JUN 12...	.2	.50	29	9.1	.60	<.10	10	52	.07	13
JUL 16...	.2	1.0	57	11	.80	.10	12	86	.12	3.0
AUG 20...	.2	1.1	66	11	.70	.10	11	93	.13	2.0
SEP 18...	.2	1.2	69	12	.80	.20	11	100	.14	1.7

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)
DEC									
12...	--	.20	--	.040	--	.26	--	.30	--
JAN									
22...	--	.20	--	.040	--	.26	--	.30	--
FEB									
20...	--	.20	--	.050	--	--	--	<.20	--
MAR									
19...	--	.10	--	.020	--	.38	--	.40	--
APR									
16...	<.010	.30	.25	.050	.050	.85	.85	.90	--
MAY									
14...	--	.30	--	.070	--	.53	--	.60	--
JUN									
12...	--	.20	--	.060	--	.14	--	.20	--
JUL									
16...	--	<.10	--	.030	--	.27	--	.30	--
AUG									
20...	--	<.10	--	.050	--	--	--	<.20	--
SEP									
18...	<.010	<.10	<.10	.040	.050	.16	.15	.20	.00

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
DEC									
12...	--	.50	.010	--	--	--	2.3	2.2	--
JAN									
22...	--	.50	.020	--	--	--	--	--	--
FEB									
20...	--	--	.020	--	--	--	--	--	--
MAR									
19...	--	.50	.020	--	--	--	1.6	1.3	--
APR									
16...	.90	1.2	.140	.050	.020	.06	11	6.1	<.01
MAY									
14...	--	.90	.040	--	--	--	6.4	3.1	--
JUN									
12...	--	.40	.020	--	--	--	--	--	--
JUL									
16...	--	--	.030	--	--	--	2.9	3.0	--
AUG									
20...	--	--	.030	--	--	--	--	--	--
SEP									
18...	.20	--	.040	.020	.020	.06	3.2	2.6	<.01

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
DEC												
12...	1100	--	--	--	--	--	--	<10	--	--	--	--
JAN												
22...	1400	--	--	--	--	--	--	<10	--	--	--	--
FEB												
20...	1400	--	--	--	--	--	--	<10	--	--	--	--
MAR												
19...	1400	--	--	--	--	--	--	20	--	--	--	--
APR												
16...	1200	2800	<1	<1	200	47	<10	<10	1	<1	50	<10
MAY												
14...	1200	--	--	--	--	--	--	<10	--	--	--	--
JUN												
12...	1300	--	--	--	--	--	--	<10	--	--	--	--
JUL												
16...	1100	--	--	--	--	--	--	<10	--	--	--	--
AUG												
20...	1200	--	--	--	--	--	--	<10	--	--	--	--
SEP												
18...	1100	30	<1	<1	<100	72	<10	10	<1	<1	<10	<10

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
DEC 12...	--	--	--	120	--	--	--	--	--	--	--
JAN 22...	--	--	--	130	--	--	--	--	--	--	--
FEB 20...	--	--	--	130	--	--	--	--	--	--	--
MAR 19...	--	--	--	130	--	--	--	--	--	--	--
APR 16...	2	9	1	150	<1	<1	<10	200	20	<.1	<.1
MAY 14...	--	--	--	140	--	--	--	--	--	--	--
JUN 12...	--	--	--	130	--	--	--	--	--	--	--
JUL 16...	--	--	--	48	--	--	--	--	--	--	--
AUG 20...	--	--	--	24	--	--	--	--	--	--	--
SEP 18...	<1	13	<1	19	<1	<1	<10	10	2	--	--

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC 12...	--	--	--	--	--	--	--	--	110	--	--
JAN 22...	--	--	--	--	--	--	--	--	120	--	--
FEB 20...	--	--	--	--	--	--	--	--	120	--	--
MAR 19...	--	--	--	--	--	--	--	--	120	--	--
APR 16...	<1	<1	1	2	<1	<1	--	1	77	20	13
MAY 14...	--	--	--	--	--	--	--	--	59	--	--
JUN 12...	--	--	--	--	--	--	--	--	62	--	--
JUL 16...	--	--	--	--	--	--	--	--	110	--	--
AUG 20...	--	--	--	--	--	--	--	--	120	--	--
SEP 18...	2	<1	2	<1	<1	<1	<1	<1	120	70	22

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR 16...	1230	142	73	28	--
MAY 07...	1440	331	32	29	48
09...	1045	365	38	37	46
14...	1100	204	34	19	--
16...	1030	209	11	6.2	--
21...	1245	262	7	5.0	71
23...	1000	232	9	5.6	--
MAY 30...	1000	286	16	12	61
JUN 06...	1030	160	23	9.9	66
12...	1230	96	11	2.9	78
21...	1300	45	14	1.7	86
JUL 16...	1100	13	1	.04	--

09060770 ROCK CREEK AT McCOY, CO

LOCATION.--Lat 39°54'44", long 106°43'30", in SE¼NE¼ sec.6, T.2 S., R.83 W., Eagle County, Hydrologic Unit 14010001, on right bank 1,900 ft downstream of bridge on State Highway 131 and 0.25 mi south of McCoy.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--October 1982 to September 1983 (measurements only) October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,660 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 27 to Feb. 20, 24, 26-27, Mar. 4-6, June 26-27. Records fair except for periods of estimated daily discharges, which are poor. Diversions for irrigation of approximately 5,000 acres above station. Several observations of specific conductance and water temperature were obtained and published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,760 ft³/s, May 16, 1984, gage height, 4.74 ft (outside high-water mark); minimum daily, 21 ft³/s, Feb. 20, 1984, Feb. 1, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 968 ft³/s at 0300 May 7, gage height, 3.50 ft; minimum daily, 21 ft³/s, Feb. 1, 1985.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	51	37	23	21	31	41	473	330	41	34	23
2	43	47	33	22	22	31	39	505	297	41	34	25
3	43	55	31	23	27	27	44	592	267	37	34	28
4	44	46	30	24	25	27	48	618	255	33	32	28
5	66	43	28	27	24	26	53	730	237	30	30	28
6	55	51	28	29	26	27	56	692	224	29	30	27
7	48	48	30	31	26	28	67	800	208	26	30	26
8	42	46	33	31	29	30	89	729	186	27	29	26
9	38	44	33	30	32	30	166	716	173	27	28	27
10	39	38	36	30	27	30	225	803	168	25	27	28
11	45	50	38	28	24	30	283	837	151	22	28	28
12	42	44	32	27	27	30	307	760	131	32	40	34
13	41	47	29	25	25	31	316	703	118	38	37	32
14	44	50	30	27	26	31	304	571	107	30	30	32
15	48	37	33	28	27	33	347	483	99	25	30	31
16	45	41	36	30	30	32	386	470	92	28	30	31
17	48	50	31	30	32	33	418	474	93	31	28	30
18	51	40	33	32	30	34	451	507	82	38	27	29
19	43	38	35	34	28	34	448	536	77	101	28	30
20	54	38	34	34	29	36	312	510	75	86	28	30
21	51	45	30	35	30	38	262	469	75	85	27	31
22	50	41	29	34	31	38	224	540	67	70	29	34
23	52	44	30	31	29	41	209	481	65	71	28	39
24	52	45	29	28	28	42	217	473	66	86	27	34
25	45	41	31	28	29	44	207	483	86	68	27	33
26	48	38	34	30	28	51	199	480	78	60	27	31
27	54	36	38	33	27	52	204	462	60	54	24	31
28	48	38	36	32	28	46	287	450	51	45	23	31
29	58	37	31	33	---	43	350	432	47	48	24	36
30	60	35	28	30	---	43	397	395	43	47	24	31
31	56	---	27	25	---	41	---	356	---	40	23	---
TOTAL	1493	1304	993	904	767	1090	6956	17530	4008	1421	897	904
MEAN	48.2	43.5	32.0	29.2	27.4	35.2	232	565	134	45.8	28.9	30.1
MAX	66	55	38	35	32	52	451	837	330	101	40	39
MIN	38	35	27	22	21	26	39	356	43	22	23	23
AC-FT	2960	2590	1970	1790	1520	2160	13800	34770	7950	2820	1780	1790

CAL YR 1984	TOTAL	42041	MEAN	115	MAX	1270	MIN	21	AC-FT	83390
WTR YR 1985	TOTAL	38267	MEAN	105	MAX	837	MIN	21	AC-FT	75900

09060770 ROCK CREEK AT MCCOY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- December 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
DEC 13...	1400	27	324	8.3	.0	12.5	160	46	11	8.8
JAN 22...	1100	34	338	8.2	.0	12.4	170	48	11	9.9
FEB 20...	1000	28	342	8.4	.0	12.5	160	45	11	9.1
MAR 19...	1000	32	350	8.5	1.0	12.6	170	49	12	9.9
APR 17...	1000	394	247	8.3	3.5	11.2	130	37	8.2	5.3
MAY 15...	1400	463	208	8.4	8.5	10.1	110	32	6.7	4.8
JUN 11...	1500	150	190	8.2	14.0	9.0	92	27	5.9	5.7
JUL 16...	1400	28	414	8.3	19.0	8.0	210	59	16	14
AUG 20...	1400	27	402	8.6	18.0	8.3	220	63	15	11
SEP 18...	1400	29	335	8.2	11.5	9.4	170	50	12	10

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
DEC 13...	.3	2.8	138	34	1.5	.20	15	200	.27	15
JAN 22...	.3	2.8	138	43	1.9	.20	17	220	.29	20
FEB 20...	.3	3.0	140	33	1.9	.20	16	200	.28	15
MAR 19...	.3	3.5	140	38	3.4	.20	16	220	.29	19
APR 17...	.2	2.7	93	28	1.8	<.10	11	150	.20	160
MAY 15...	.2	1.1	86	18	1.2	.10	12	130	.17	160
JUN 11...	.3	1.5	81	21	1.3	.10	12	120	.17	50
JUL 16...	.4	4.0	173	47	2.3	.20	14	260	.35	20
AUG 20...	.3	4.0	163	54	1.8	.20	15	260	.36	19
SEP 18...	.3	3.4	147	37	2.0	.20	14	220	.29	17

09060770 ROCK CREEK AT MCCOY, CO.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)
DEC									
13...	--	.20	--	.020	--	.58	--	.60	--
JAN									
22...	--	.30	--	.050	--	.25	--	.30	--
FEB									
20...	--	.30	--	.050	--	.15	--	.20	--
MAR									
19...	--	.30	--	.050	--	.35	--	.40	--
APR									
17...	<.010	.20	.22	.050	.040	.85	.86	.90	--
MAY									
15...	--	<.10	--	.070	--	.63	--	.70	--
JUN									
11...	--	<.10	--	.050	--	.75	--	.80	--
JUL									
16...	--	<.10	--	.030	--	.37	--	.40	--
AUG									
20...	--	<.10	--	.050	--	.35	--	.40	--
SEP									
18...	<.010	<.10	<.10	.040	.040	.26	.26	.30	.00

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
DEC									
13...	--	.80	.100	--	--	--	4.4	2.6	--
JAN									
22...	--	.60	.030	--	--	--	--	--	--
FEB									
20...	--	.50	.030	--	--	--	--	--	--
MAR									
19...	--	.70	.050	--	--	--	3.6	3.3	--
APR									
17...	.90	1.1	.080	.040	.020	.06	10	7.9	<.01
MAY									
15...	--	--	.080	--	--	--	7.1	6.7	--
JUN									
11...	--	--	.150	--	--	--	--	--	--
JUL									
16...	--	--	.030	--	--	--	6.8	6.2	--
AUG									
20...	--	--	.020	--	--	--	--	--	--
SEP									
18...	.30	--	.070	.010	.010	.03	4.2	4.6	<.01

09060770 ROCK CREEK AT MCCOY, CO.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
DEC 13...	1400	--	--	--	--	--	--	20	--	--	--	--
JAN 22...	1100	--	--	--	--	--	--	20	--	--	--	--
FEB 20...	1000	--	--	--	--	--	--	20	--	--	--	--
MAR 19...	1000	--	--	--	--	--	--	20	--	--	--	--
APR 17...	1000	2300	1	<1	300	80	<10	10	2	<1	40	<10
MAY 15...	1400	--	--	--	--	--	--	20	--	--	--	--
JUN 11...	1500	--	--	--	--	--	--	10	--	--	--	--
JUL 16...	1400	--	--	--	--	--	--	30	--	--	--	--
AUG 20...	1400	--	--	--	--	--	--	30	--	--	--	--
SEP 18...	1400	190	1	1	<100	87	<10	30	<1	<1	<10	--

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
DEC 13...	--	--	--	29	--	--	--	--	--	--	--
JAN 22...	--	--	--	36	--	--	--	--	--	--	--
FEB 20...	--	--	--	37	--	--	--	--	--	--	--
MAR 19...	--	--	--	37	--	--	--	--	--	--	--
APR 17...	1	6	1	120	1	<1	<10	100	26	<.1	<.1
MAY 15...	--	--	--	110	--	--	--	--	--	--	--
JUN 11...	--	--	--	110	--	--	--	--	--	--	--
JUL 16...	--	--	--	20	--	--	--	--	--	--	--
AUG 20...	--	--	--	34	--	--	--	--	--	--	--
SEP 18...	<1	2	1	49	<1	1	<10	30	13	--	--

DATE	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
DEC 13...	--	--	--	--	--	--	--	--	280	--	--
JAN 22...	--	--	--	--	--	--	--	--	290	--	--
FEB 20...	--	--	--	--	--	--	--	--	290	--	--
MAR 19...	--	--	--	--	--	--	--	--	300	--	--
APR 17...	<1	<1	6	5	<1	<1	--	<1	210	30	12
MAY 15...	--	--	--	--	--	--	--	--	190	--	--
JUN 11...	--	--	--	--	--	--	--	--	170	--	--
JUL 16...	--	--	--	--	--	--	--	--	400	--	--
AUG 20...	--	--	--	--	--	--	--	--	380	--	--
SEP 18...	3	<1	5	1	<1	<1	<1	<1	320	110	10

09060950 BIG ALKALI CREEK BELOW CASTLE CREEK, NEAR BURNS, CO

LOCATION.--Lat 39°51'52", long 106°49'01", in NE¼SE¼ sec. 20, T.2 S., R.84 W., Eagle County, Hydrologic Unit 14010001, on left bank 1,200 ft below Castle Creek, 1.0 mi above mouth and 3.0 mi east of Burns, CO.

DRAINAGE AREA.--34.1 mi^2.

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges during water year: Nov. 5 to Dec. 9, Apr. 21 to May 8. Records good except for estimated daily discharges, which are poor. Water stored in Hurt Reservoir, approximate capacity, 100 acre-feet, for use in Catamount Creek Drainage. Diversion out of basin for irrigation of land along the Colorado River.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 168 ft^3/s, May 24, 1984, gage height, 2.85 ft; minimum daily, 0.13 ft^3/s, Oct. 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 101 ft^3/s at 0100 May 10, gage height, 2.49 ft; minimum daily, 1.20 ft^3/s, Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	5.3	2.0	1.8	1.9	1.8	4.1	52	43	4.4	7.6	1.3
2	8.1	4.8	2.0	1.7	1.7	1.9	7.7	57	40	4.1	6.9	1.5
3	4.4	4.1	1.9	1.8	1.7	2.1	21	64	39	3.7	6.5	1.6
4	4.4	4.2	1.9	1.8	1.8	1.8	15	80	35	3.9	5.6	1.5
5	7.3	4.0	1.8	2.0	1.9	1.9	17	88	32	3.7	4.8	1.5
6	4.8	4.2	1.8	2.2	1.9	1.6	19	85	30	3.7	4.0	1.4
7	4.6	4.1	1.9	2.3	1.9	1.8	29	82	36	3.5	3.7	1.2
8	4.6	4.1	1.9	2.6	1.9	2.5	26	88	40	3.5	3.3	1.3
9	4.6	4.0	1.9	2.7	1.8	1.9	29	86	33	3.3	3.1	1.3
10	4.6	3.9	1.9	2.2	1.8	2.1	21	91	34	3.0	2.9	1.3
11	4.4	3.7	1.9	2.1	1.8	3.2	23	78	24	3.0	3.7	1.5
12	4.4	3.6	1.8	1.9	1.8	3.0	19	67	19	3.1	5.1	1.7
13	4.4	3.4	1.6	1.9	1.8	3.3	24	60	12	4.9	3.4	1.5
14	4.4	3.2	1.6	1.9	1.8	3.9	28	53	17	3.5	3.0	1.4
15	4.6	3.0	1.4	1.9	1.8	6.5	22	51	16	3.7	2.7	1.3
16	5.2	2.8	1.4	2.0	1.8	6.9	27	56	13	2.9	2.6	1.3
17	6.3	3.0	1.5	2.1	1.8	7.7	37	58	11	2.6	2.4	1.3
18	5.1	3.1	1.5	2.1	1.7	7.8	44	55	10	4.0	2.5	1.3
19	5.3	2.9	1.5	2.3	1.7	11	37	54	9.5	13	2.4	1.4
20	6.0	2.7	1.5	2.1	1.7	9.9	38	52	9.0	21	2.3	1.4
21	5.8	2.6	1.5	2.1	1.7	6.2	33	50	7.8	50	2.2	1.4
22	5.6	2.6	1.7	2.2	1.6	3.4	25	48	6.5	27	2.4	1.7
23	5.6	2.5	1.5	1.9	1.7	3.3	24	50	6.3	20	2.2	1.7
24	5.6	2.5	1.6	1.9	1.7	6.4	23	50	5.9	15	2.1	1.4
25	5.3	2.3	1.5	1.9	1.6	7.9	22	50	7.6	13	2.0	1.6
26	3.8	2.3	1.6	1.9	1.6	3.6	22	59	7.0	17	1.9	1.6
27	3.5	2.3	1.8	2.1	2.4	2.6	24	58	6.8	14	1.9	1.6
28	5.7	2.2	1.9	2.1	1.6	3.3	34	56	5.5	10	2.0	2.7
29	8.6	2.2	2.1	2.1	---	4.6	40	55	4.8	9.6	1.7	2.8
30	8.4	2.1	1.9	1.9	---	4.7	45	50	4.6	9.3	1.4	2.9
31	6.9	---	1.7	1.9	---	4.3	---	47	---	8.2	1.4	---
TOTAL	165.8	97.7	53.5	63.4	49.9	132.9	779.8	1930	565.3	291.6	99.7	47.4
MEAN	5.35	3.26	1.73	2.05	1.78	4.29	26.0	62.3	18.8	9.41	3.22	1.58
MAX	8.6	5.3	2.1	2.7	2.4	11	45	91	43	50	7.6	2.9
MIN	3.5	2.1	1.4	1.7	1.6	1.6	4.1	47	4.6	2.6	1.4	1.2
AC-FT	329	194	106	126	99	264	1550	3830	1120	578	198	94

CAL YR 1984	TOTAL	4772.4	MEAN	13.1	MAX	130	MIN	1.2	AC-FT 9470
WTR YR 1985	TOTAL	4277.0	MEAN	11.7	MAX	91	MIN	1.2	AC-FT 8480

09063000 EAGLE RIVER AT RED CLIFF, CO

LOCATION.--Lat 39°30'30", long 106°21'58", in NW¼SW¼ sec.20, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank at Red Cliff, 0.3 mi upstream from Turkey Creek.

DRAINAGE AREA.--70.0 mi².

PERIOD OF RECORD.--October 1910 to September 1925, May 1944 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area. WRD Colo. 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 8,653.79 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Jan. 8, 1911, to Sept. 30, 1925, nonrecording gage at bridge 0.2 mi downstream at different datum. May 25, 1944, to Oct. 12, 1952, water-stage recorder at site 200 ft upstream at datum 1.46 ft, lower. Prior to May 6, 1982, at site 250 ft downstream at datum 5.00 ft, lower.

REMARKS.--Estimated daily discharges: Oct. 1-30, Nov. 16, 20-24, Dec. 3-8, 11-12, 18, 20, 22-25, Jan. 2-6, 12-15, 23-27, 31, Feb. 1-4, 11, 14-15, 18-20, 22, Feb. 24 to Mar. 9, 23-24, 30. Records good except for estimated daily discharges, which are poor. Transmountain diversions above station by Columbine, Ewing, and Wurtz ditches. Transbasin diversion above station from Robinson Reservoir, capacity, 2,520 acre-ft to Tenmile Creek for mining development. Small diversions for irrigation of 400 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--56 years (water years 1911-25, 1945-85), 49.5 ft³/s; 35,280 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,010 ft³/s, June 5, 1912, gage height, 4.0 ft, site and datum then in use, from rating curve extended above 500 ft³/s; maximum gage height recorded, 6.43 ft, May 24, 1984; minimum daily discharge, 1.0 ft³/s, Oct. 1, 5, 1917.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 280 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	2200	*298	*4.76	No other peak greater than base discharge.			

Minimum daily, 11.0 ft³/s, Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	27	23	21	13	15	17	102	235	68	34	15
2	28	25	21	13	12	15	17	125	226	66	33	14
3	27	26	18	11	15	15	19	155	224	63	32	14
4	27	25	20	13	17	13	19	174	222	59	31	15
5	36	25	18	16	18	12	20	182	217	57	29	15
6	40	26	16	18	17	15	18	169	226	54	28	14
7	37	25	16	21	16	15	22	170	246	52	27	13
8	34	25	20	25	16	15	24	185	272	51	26	14
9	32	25	26	19	17	18	23	188	272	50	25	14
10	30	28	21	18	15	16	23	196	272	52	25	13
11	30	27	19	16	15	16	25	193	248	48	24	14
12	29	25	19	14	18	16	27	165	228	48	26	17
13	31	25	19	12	16	16	32	151	211	51	23	14
14	34	25	19	12	15	18	37	134	196	44	21	13
15	33	27	19	15	14	16	48	130	184	43	20	14
16	30	26	18	21	17	16	54	128	176	41	20	15
17	30	27	19	17	15	18	60	126	164	39	18	14
18	31	26	16	19	13	16	68	126	155	38	18	13
19	28	26	18	16	12	17	77	135	147	43	19	13
20	29	22	16	16	14	17	66	133	137	46	18	13
21	28	21	18	16	15	18	59	137	128	57	16	13
22	28	24	17	17	15	19	54	140	118	61	16	15
23	27	23	16	15	16	14	51	164	111	54	15	16
24	27	25	18	12	14	14	50	176	103	49	15	16
25	25	23	17	12	15	19	49	190	104	46	15	16
26	25	21	21	14	14	19	48	196	96	43	15	15
27	30	26	19	17	13	16	48	209	90	43	15	17
28	29	29	18	19	15	19	58	237	81	40	15	21
29	29	26	17	16	---	17	66	253	76	39	15	21
30	29	25	21	17	---	14	77	257	71	37	15	18
31	27	---	19	15	---	20	---	242	---	35	14	---
TOTAL	929	756	582	503	422	504	1256	5268	5236	1517	663	449
MEAN	30.0	25.2	18.8	16.2	15.1	16.3	41.9	170	175	48.9	21.4	15.0
MAX	40	29	26	25	18	20	77	257	272	68	34	21
MIN	25	21	16	11	12	12	17	102	71	35	14	13
AC-FT	1840	1500	1150	998	837	1000	2490	10450	10390	3010	1320	891

CAL YR 1984 TOTAL 30846.1 MEAN 84.3 MAX 696 MIN 6.6 AC-FT 61180
WTR YR 1985 TOTAL 18085 MEAN 49.5 MAX 272 MIN 11 AC-FT 35870

09063200 WEARYMAN CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'14", long 106°19'06", in SW¼SE¼ sec.15, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 0.4 mi upstream from mouth and 2.5 mi east of Red Cliff.

DRAINAGE AREA.--8.78 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,158 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 16 to Apr. 30. Records fair except for estimated daily discharges, which are poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 8.90 ft³/s; 6,450 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 155 ft³/s, June 20, 1983, gage height, 3.61 ft; minimum daily, 0.30 ft³/s, Feb. 21, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	1900	*83	*2.74	June 14	2000	76	2.70

Minimum Daily discharge, 1.5 ft³/s, Feb. 12-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	3.3	2.5	2.2	1.8	2.0	2.3	6.7	46	31	8.6	4.0
2	6.5	3.3	2.5	2.1	1.8	2.0	2.1	8.3	46	29	8.3	3.9
3	6.2	3.2	2.5	2.0	1.8	2.0	2.2	13	46	26	8.2	3.8
4	6.4	3.2	2.5	2.0	1.8	1.9	2.4	16	48	24	8.2	4.5
5	6.6	3.1	2.5	2.1	1.9	1.9	2.5	18	51	23	8.0	4.2
6	6.5	3.0	2.5	2.1	1.9	1.9	2.1	18	53	21	7.8	3.7
7	6.3	3.0	2.4	2.1	1.8	2.0	2.1	18	58	20	6.8	3.5
8	6.2	3.1	2.4	2.1	1.8	2.1	2.3	20	45	19	6.0	3.6
9	5.9	3.0	2.5	2.2	1.8	2.0	2.7	21	56	18	5.9	3.1
10	5.8	3.0	2.6	2.2	1.6	2.1	2.8	22	73	18	5.8	3.0
11	5.5	2.9	2.7	2.1	1.6	2.1	2.9	21	56	17	5.5	3.2
12	5.4	2.8	2.7	2.1	1.5	2.1	3.2	19	68	16	5.9	3.8
13	5.6	2.6	2.7	2.2	1.5	2.3	3.8	17	71	16	5.4	3.2
14	5.1	2.7	2.7	2.0	1.6	2.2	4.4	15	68	15	5.1	3.0
15	4.8	2.7	2.7	1.9	1.8	2.2	5.4	14	73	14	4.9	3.2
16	4.8	2.8	2.8	1.9	1.8	2.4	6.4	13	72	14	4.8	2.9
17	4.6	2.7	2.7	1.9	1.7	2.3	7.6	14	71	13	4.7	2.7
18	4.5	2.8	2.6	1.9	1.7	2.4	8.8	16	69	12	4.5	2.7
19	4.5	2.9	2.6	1.8	1.8	2.5	9.2	18	67	12	4.4	2.7
20	4.5	2.9	2.6	1.8	1.8	2.6	8.4	18	63	13	4.1	2.7
21	4.5	2.9	2.6	1.7	1.9	2.7	7.4	18	56	12	4.2	2.7
22	4.5	2.9	2.5	1.6	2.1	2.7	6.6	19	54	13	4.1	3.1
23	4.4	2.8	2.3	1.6	1.9	2.7	6.0	21	56	12	3.9	2.6
24	4.2	2.7	2.2	1.7	1.9	2.5	5.3	24	53	11	3.5	2.7
25	4.0	2.7	2.1	1.8	1.9	2.4	5.1	28	51	11	3.4	2.9
26	3.9	2.6	2.2	1.8	1.9	2.5	5.0	30	45	9.9	3.3	3.1
27	3.7	2.5	2.2	1.8	1.9	2.7	5.0	33	42	9.6	3.4	3.2
28	3.7	2.5	2.3	1.8	2.0	2.6	5.0	37	39	9.6	3.4	3.8
29	3.6	2.6	2.3	1.9	---	2.4	5.2	41	35	9.6	3.3	3.5
30	3.4	2.5	2.3	2.0	---	2.3	5.6	43	33	9.2	3.2	3.2
31	3.4	---	2.2	1.9	---	2.2	---	45	---	8.7	3.3	---
TOTAL	155.7	85.7	76.9	60.3	50.3	70.7	139.8	665.0	1664	486.6	161.9	98.2
MEAN	5.02	2.86	2.48	1.95	1.80	2.28	4.66	21.5	55.5	15.7	5.22	3.27
MAX	6.7	3.3	2.8	2.2	2.1	2.7	9.2	45	73	31	8.6	4.5
MIN	3.4	2.5	2.1	1.6	1.5	1.9	2.1	6.7	33	8.7	3.2	2.6

CAL YR 1984 TOTAL 6448.80 MEAN 17.6 MAX 115 MIN .80
WTR YR 1985 TOTAL 3715.1 MEAN 10.2 MAX 73 MIN 1.5

09063400 TURKEY CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'22", long 106°20'08", in NW¼SW¼ sec.16, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 400 ft downstream from Lime Creek, 1.9 mi northeast of Red Cliff, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--23.9 mi².

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,918 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 25-26, Nov. 5, 10, 15-16, 18-22, 27, Dec. 6-9, Dec. 11 to Apr. 30, Sept. 15-30. Records good except for estimated daily discharges, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 23.4 ft³/s; 16,950 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 556 ft³/s, June 8, 1985, gage height, 2.87 ft, from rating curve extended above 325 ft³/s; maximum recorded gage height, 3.22 ft, June 24, 1983 (backwater from debris); minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 30	2000	228	2.31	June 19	0800	236	2.15
June 8	1900	*556	*2.87				

Minimum daily discharge, 4.1 ft³/s, Feb. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	7.1	4.9	4.6	4.4	9.8	19	174	58	20	9.5
2	14	12	7.1	4.8	4.6	4.7	9.8	27	175	52	21	9.3
3	13	10	6.7	4.8	4.6	4.9	10	45	176	50	19	9.1
4	13	9.8	6.7	4.9	4.5	4.6	11	65	185	51	18	10
5	15	9.8	6.7	5.0	4.4	4.5	10	75	214	48	18	9.1
6	15	10	5.6	5.0	4.5	4.9	11	76	264	44	17	8.5
7	14	9.6	5.7	5.2	4.6	5.2	12	76	282	41	17	8.5
8	13	9.6	6.0	5.2	4.5	5.6	11	84	324	38	17	8.3
9	12	9.9	6.4	5.2	4.5	5.4	12	92	409	37	17	7.8
10	13	9.2	6.4	5.2	4.5	5.4	13	94	385	35	16	7.7
11	12	9.6	6.4	5.2	4.4	5.4	14	98	215	34	16	8.2
12	12	11	6.4	5.2	4.3	5.6	15	84	200	33	17	8.4
13	13	9.7	6.0	5.2	4.3	6.0	18	67	196	33	15	7.6
14	13	9.6	5.8	5.2	4.3	6.2	19	58	179	30	14	7.2
15	11	10	5.8	5.0	4.2	5.8	22	49	166	28	14	7.4
16	11	9.8	5.8	5.0	4.1	6.0	40	47	144	28	14	7.8
17	13	9.0	5.8	5.0	4.2	6.2	46	48	170	27	14	8.0
18	12	9.2	5.6	4.8	4.3	6.2	49	55	212	27	14	7.6
19	13	9.4	5.2	4.7	4.3	6.4	54	66	223	28	14	7.4
20	11	9.4	5.6	4.7	4.3	6.6	52	72	183	27	13	7.2
21	11	9.2	5.4	5.0	4.3	7.0	44	77	143	27	12	7.2
22	11	8.0	5.2	5.0	4.4	6.8	30	80	128	30	12	7.4
23	11	7.9	5.2	5.0	4.5	7.2	27	89	130	28	12	7.8
24	11	7.9	5.4	5.0	4.5	7.4	24	107	129	26	11	8.0
25	10	7.9	5.4	5.0	4.3	7.6	24	120	124	25	10	7.4
26	11	7.8	5.2	5.0	4.2	8.0	23	128	107	24	10	7.6
27	12	7.2	4.8	4.9	4.3	8.2	22	139	85	23	9.8	7.6
28	11	7.5	4.8	4.8	4.4	9.0	20	166	89	22	10	8.4
29	11	7.5	4.7	4.7	---	8.6	21	185	84	22	9.6	9.4
30	11	7.2	4.8	4.6	---	8.4	20	210	69	22	9.1	8.1
31	11	---	5.0	4.6	---	9.0	---	207	---	21	8.9	---
TOTAL	377	275.7	178.7	153.8	122.9	197.2	693.6	2805	5564	1019	439.4	243.5
MEAN	12.2	9.19	5.76	4.96	4.39	6.36	23.1	90.5	185	32.9	14.2	8.12
MAX	15	12	7.1	5.2	4.6	9.0	54	210	409	58	21	10
MIN	10	7.2	4.7	4.6	4.1	4.4	9.8	19	69	21	8.9	7.2
AC-FT	748	547	354	305	244	391	1380	5560	11040	2020	872	483

CAL YR 1984	TOTAL	18394.1	MEAN	50.3	MAX	359	MIN	2.0	AC-FT	36480
WTR YR 1985	TOTAL	12069.8	MEAN	33.1	MAX	409	MIN	4.1	AC-FT	23940

09063900 MISSOURI CREEK NEAR GOLD PARK, CO

LOCATION.--Lat 39°23'25", long 106°28'10", Eagle County, Hydrologic Unit 14010003, on left bank 50 ft downstream from road culvert, 0.6 mi upstream from Fancy Creek, 2.2 mi southwest of Gold Park, and 10 mi southwest of Red Cliff.

DRAINAGE AREA.--6.42 mi^2.

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,980 ft, above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 28 to Jan. 29, Mar. 17 to Apr. 15, June 17 to July 3. Records good except for estimated daily discharges, which are poor. Transmountain diversion above station to Arkansas River basin through Homestake tunnel. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--13 years, 8.21 ft^3/s; 5,950 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 300 ft^3/s, July 4, 1975, gage height, 3.19 ft, from rating curve extended above 35 ft^3/s; maximum gage height, 3.83 ft, July 30, 1983; minimum daily discharge, 0.24 ft^3/s, Feb. 12, 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 182 ft^3/s at 2000 June 8, gage height, 3.33 ft; minimum daily, 0.61 ft^3/s, Feb. 26-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	4.8	1.6	1.0	.97	.66	.88	11	9.8	42	19	4.0
2	5.1	4.5	1.6	.90	.97	.66	1.0	19	11	45	19	4.7
3	5.1	4.4	1.6	1.0	.97	.67	1.2	23	14	48	17	4.7
4	5.9	4.1	1.5	1.1	.90	.70	1.4	19	20	53	16	5.6
5	10	4.0	1.5	1.1	.90	.70	1.7	11	34	54	14	4.5
6	10	3.8	1.5	1.1	.90	.72	2.0	8.9	50	53	12	3.7
7	11	3.5	1.5	1.1	.90	.75	1.9	8.9	82	49	11	3.5
8	9.7	3.3	1.5	1.1	.84	.75	1.8	11	107	43	11	3.4
9	8.9	3.7	1.5	1.1	.82	.78	1.9	11	85	45	12	2.8
10	8.3	4.4	1.5	1.1	.82	.82	2.1	12	68	47	10	2.9
11	8.1	4.2	1.4	1.1	.82	.82	2.4	9.6	29	42	9.2	3.2
12	7.9	3.6	1.3	1.1	.79	.87	2.5	6.1	25	46	11	4.6
13	7.8	3.2	1.5	1.0	.75	.90	2.6	4.4	36	66	7.6	3.4
14	8.3	3.3	1.6	1.0	.75	.92	2.9	3.9	36	43	6.9	2.9
15	8.0	3.6	1.5	1.1	.75	.99	3.3	3.9	40	36	6.5	3.8
16	8.0	3.4	1.4	1.1	.74	1.0	4.0	5.1	44	35	6.0	3.9
17	8.0	3.3	1.4	1.1	.70	1.0	5.6	6.4	52	35	5.6	3.1
18	8.0	2.9	1.4	1.1	.70	1.0	6.7	7.0	27	35	5.6	2.7
19	8.0	2.7	1.5	1.1	.70	1.0	7.7	6.5	32	36	5.3	2.9
20	8.0	2.7	1.5	1.1	.70	1.1	6.2	5.8	52	38	5.4	2.7
21	8.0	2.7	1.4	1.0	.66	1.0	4.7	5.8	64	50	5.4	2.5
22	7.5	2.7	1.3	1.0	.66	1.0	4.0	6.5	60	62	5.6	3.7
23	6.4	2.6	1.1	1.0	.66	1.1	3.6	9.1	66	50	5.3	4.0
24	6.2	2.9	.98	1.0	.66	1.2	3.3	14	74	40	4.5	3.3
25	6.0	2.4	1.0	1.0	.63	1.2	3.2	16	88	18	4.0	3.3
26	5.7	2.3	1.2	1.0	.61	1.1	3.0	15	73	18	3.9	3.3
27	5.6	2.3	1.3	1.0	.61	1.0	3.2	19	62	29	3.9	3.5
28	5.6	1.7	1.3	1.0	.61	.92	4.4	26	52	26	3.9	4.7
29	5.5	1.8	1.3	1.0	---	.84	5.6	28	48	21	4.0	5.2
30	5.3	1.7	1.3	.99	---	.82	6.3	21	52	20	3.7	4.2
31	5.0	---	1.2	.97	---	.82	---	13	---	21	3.7	---
TOTAL	226.1	96.5	43.18	32.36	21.49	27.81	101.08	366.9	1492.8	1246	258.0	110.7
MEAN	7.29	3.22	1.39	1.04	.77	.90	3.37	11.8	49.8	40.2	8.32	3.69
MAX	11	4.8	1.6	1.1	.97	1.2	7.7	28	107	66	19	5.6
MIN	5.0	1.7	.98	.90	.61	.66	.88	3.9	9.8	18	3.7	2.5
AC-FT	448	191	86	64	43	55	200	728	2960	2470	512	220

CAL YR 1984 TOTAL 7692.98 MEAN 21.0 MAX 172 MIN .40 AC-FT 15260
WTR YR 1985 TOTAL 4022.92 MEAN 11.0 MAX 107 MIN .61 AC-FT 7980

09064000 HOMESTAKE CREEK AT GOLD PARK, CO

LOCATION.--Lat 39°24'20", long 106°25'58", Eagle County, Hydrologic Unit 14010003, on left bank at Gold Park, 400 ft downstream from ford, at Gold Park Campground, 0.5 mi downstream from French Creek, and 8 mi southwest of Red Cliff.

DRAINAGE AREA.--36.1 mi^2.

PERIOD OF RECORD.--October 1947 to September 1954, August 1972 to current year.

REVISED RECORDS.--WRD Colo. 1973: Drainage area at former site.

GAGE.--Water-stage recorder. Elevation of gage is 9,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 1, 1972, water-stage recorder at site 1,500 ft upstream at datum 9,245 ft, above National Geodetic Vertical Datum of 1929 (river-profile survey).

REMARKS.--Estimated daily discharges: Nov. 2 to Apr. 12. Records fair except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake, capacity, 44,360 acre-ft, since June 7, 1966. Transmountain diversion above station to Arkansas River basin through Homestake tunnel since June 6, 1967. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years (water years 1948-54), 63.4 ft^3/s; 45,930 acre-ft/yr, prior to diversion through Homestake tunnel; 13 years (water years 1973-85), 28.8 ft^3/s; 20,870 acre-ft/yr, subsequent to diversion through Homestake tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft^3/s, June 13, 1953, gage height, 6.84 ft, site and datum then in use, from rating curve extended above 700 ft^3/s; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 470 ft^3/s at 2100 June 8, gage height, 5.59 ft; minimum daily, 6.0 ft^3/s, Jan. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	17	10	7.4	6.6	7.4	8.6	67	46	98	50	15
2	20	16	10	7.2	6.9	7.2	8.6	98	45	101	47	15
3	20	15	9.8	7.2	6.4	7.1	8.8	107	49	105	43	15
4	26	15	9.9	7.2	6.4	7.2	9.0	96	58	111	41	16
5	38	14	10	7.5	6.5	7.8	8.8	78	82	103	38	16
6	38	13	9.8	7.9	6.7	8.0	8.6	69	118	90	34	16
7	38	12	9.8	7.8	6.8	7.4	8.6	65	184	83	31	14
8	36	13	10	7.0	6.6	7.5	8.7	68	290	75	30	14
9	33	13	10	7.2	6.6	7.6	9.0	58	243	74	29	13
10	32	14	9.8	7.5	6.6	7.7	9.6	68	189	91	29	15
11	30	14	9.6	7.4	6.6	7.8	11	58	101	106	28	14
12	29	13	9.6	7.4	6.2	7.9	12	39	81	115	31	18
13	30	12	9.6	7.2	6.3	8.1	14	30	92	153	26	14
14	32	12	9.6	7.0	6.4	8.5	17	28	95	109	22	12
15	29	13	9.6	7.1	6.5	8.7	23	30	93	97	21	13
16	36	12	9.2	7.4	6.6	8.3	26	39	107	83	18	14
17	43	12	9.4	7.4	6.8	8.3	31	47	111	55	18	13
18	37	12	9.6	7.0	6.9	8.5	43	50	73	58	17	12
19	40	12	9.2	7.2	7.1	9.1	44	50	79	60	17	12
20	32	12	8.6	7.4	7.3	9.5	35	44	126	62	17	12
21	36	12	8.8	7.4	7.4	9.7	29	41	171	92	17	11
22	22	11	9.2	7.1	7.6	9.4	23	44	172	137	17	15
23	22	11	8.7	6.6	7.5	9.4	21	54	155	118	16	15
24	37	11	8.3	6.5	7.4	9.4	19	75	163	99	17	15
25	39	11	8.4	6.6	7.4	9.3	18	87	240	48	16	15
26	48	11	8.6	6.6	7.3	9.0	17	82	166	48	16	15
27	33	11	8.6	6.5	7.3	9.3	20	87	113	58	16	15
28	31	10	8.4	6.0	7.4	8.8	27	110	106	57	16	22
29	20	11	7.9	6.2	---	8.2	32	103	118	51	15	21
30	22	11	7.4	6.7	---	8.5	41	71	113	55	15	21
31	22	---	7.2	6.8	---	8.8	---	54	---	57	15	---
TOTAL	972	376	284.6	219.4	192.1	259.4	591.3	1997	3779	2649	763	448
MEAN	31.4	12.5	9.18	7.08	6.86	8.37	19.7	64.4	126	85.5	24.6	14.9
MAX	48	17	10	7.9	7.6	9.7	44	110	290	153	50	22
MIN	20	10	7.2	6.0	6.2	7.1	8.6	28	45	48	15	11
AC-FT	1930	746	565	435	381	515	1170	3960	7500	5250	1510	889

CAL YR 1984 TOTAL 29321.2 MEAN 80.1 MAX 602 MIN 7.2 AC-FT 58160
WTR YR 1985 TOTAL 12530.8 MEAN 34.3 MAX 290 MIN 6.0 AC-FT 24850

09064500 HOMESTAKE CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°28'24", long 106°22'02", in NE¼NE¼ sec.6, T.7 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank at downstream side of Forest Service road bridge, 2.4 mi south of Red Cliff, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--58.3 mi².

PERIOD OF RECORD.--October 1910 to September 1918, May 1944 to current year. Published as "at Redcliff" October 1910 to September 1916.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,783 ft above National Geodetic Vertical Datum of 1929 (river-profile survey). See WSP 1713 or 1733 for history of changes prior to May 8, 1961.

REMARKS.--Estimated daily discharges: Oct. 30 to Apr. 30, June 9-18, Sept. 4-17. Records fair except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake (capacity, 44,360 acre-ft) since June 7, 1966. Transmountain diversions above station through Homestake tunnel (see elsewhere in this report) since June 6, 1967. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years (water years 1911-18, 1945-66), 86.6 ft³/s; 62,740 acre-ft/yr, prior to diversion through Homestake tunnel: 19 years (water years 1967-85), 43.3 ft³/s; 31,370 acre-ft/yr, subsequent to diversion through Homestake tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,300 ft³/s, June 24, 1918, gage height, 6.2 ft, site and datum then in use; minimum observed, 0.60 ft³/s, Jan. 25, 1915 (discharge measurement).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 649 ft³/s at 2300 June 8, gage height, 3.53 ft; minimum daily, 10 ft³/s, Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	39	24	14	10	13	14	162	122	115	60	19
2	30	39	26	14	11	13	15	210	118	116	57	22
3	29	39	23	14	11	13	17	243	126	120	54	22
4	36	34	24	14	11	13	19	241	133	127	49	21
5	50	33	21	15	11	13	14	220	162	121	45	21
6	50	33	20	15	12	13	16	193	221	99	42	20
7	50	33	19	16	12	13	19	170	296	94	40	17
8	44	33	20	16	12	13	22	175	440	83	39	17
9	43	32	20	15	12	14	27	162	350	80	39	16
10	42	30	20	15	11	16	33	170	250	93	40	18
11	42	30	20	15	11	15	39	167	150	118	38	17
12	42	31	21	14	11	14	49	121	120	131	43	19
13	43	30	22	13	11	14	62	97	130	187	37	18
14	46	29	22	13	11	14	80	82	130	133	33	15
15	43	30	21	14	11	15	90	79	130	112	30	17
16	50	29	22	14	12	16	100	92	140	105	27	18
17	62	29	22	14	12	17	110	104	140	64	25	15
18	54	29	23	14	12	17	130	109	110	68	25	14
19	52	30	22	15	12	17	130	109	116	80	25	14
20	48	30	19	15	13	17	120	99	159	83	23	14
21	52	29	19	14	12	17	100	99	222	114	22	14
22	42	29	18	13	12	17	90	98	227	205	22	18
23	43	30	15	13	12	16	80	112	202	156	22	20
24	43	30	16	12	12	17	70	136	203	143	20	19
25	52	30	16	12	12	19	64	167	317	68	19	19
26	52	29	16	13	12	19	55	164	229	61	18	18
27	48	28	16	14	13	17	62	160	150	75	19	19
28	50	29	16	14	13	16	76	210	131	72	19	28
29	46	29	16	14	---	15	90	221	145	63	19	28
30	44	26	16	12	---	14	148	177	138	66	18	22
31	42	---	15	11	---	14	---	137	---	68	18	---
TOTAL	1399	931	610	431	327	471	1941	4686	5507	3220	987	559
MEAN	45.1	31.0	19.7	13.9	11.7	15.2	64.7	151	184	104	31.8	18.6
MAX	62	39	26	16	13	19	148	243	440	205	60	28
MIN	29	26	15	11	10	13	14	79	110	61	18	14
AC-FT	2770	1850	1210	855	649	934	3850	9290	10920	6390	1960	1110

CAL YR 1984 TOTAL 43461 MEAN 119 MAX 831 MIN 12 AC-FT 86200
WTR YR 1985 TOTAL 21069 MEAN 57.7 MAX 440 MIN 10 AC-FT 41790

09065100 CROSS CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°34'05", long 106°24'43", in SW¼SW¼ sec.36, T.5 S., R.81 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.4 mi upstream from mouth and 1.5 mi southeast of Minturn.

DRAINAGE AREA.--33.5 mi².

PERIOD OF RECORD.--May 1956 to September 1963, October 1967 to current year.

REVISED RECORDS.--WDR-CO-81-2: 1980 (M).

GAGE.--Water-stage recorder. Elevation of gage is 7,992 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 18, 1956, nonrecording gage at site 0.3 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 15 - Jan. 31, Feb. 3 - Mar. 17, 20-21, 23, 26-27, 29-31. Records good except for estimated daily discharges, which are poor. Bolts ditch exports water from above station to tailings ponds and recreation lake along Eagle River. Diversion 0.2 mi above station for water supply of school and for municipal supply of Minturn. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--25 years, 53.3 ft³/s; 38,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 754 ft³/s, June 30, 1957, gage height, 5.45 ft; maximum gage height, 6.14 ft, Aug. 6, 1983; minimum daily discharge, 0.1 ft³/s, Dec. 27-31, 1962, Jan. 6-8, 11-15, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	0400	*664	*5.49	July 22	0900	433	4.87
June 18	0600	412	4.66				

Minimum daily discharge, 2.9 ft³/s, Mar. 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	22	9.4	7.4	4.0	4.0	8.2	79	157	131	68	16
2	25	23	9.0	4.6	3.8	4.0	8.6	101	170	157	67	18
3	24	21	8.6	4.0	4.0	4.0	7.4	130	220	164	65	21
4	26	21	8.8	4.2	4.2	3.8	6.5	179	230	175	57	28
5	38	26	8.6	4.4	4.4	3.6	5.0	182	283	177	50	25
6	43	19	8.4	4.6	4.4	4.0	9.3	153	336	175	47	19
7	42	19	8.4	4.8	4.2	4.0	9.3	155	396	168	44	16
8	38	16	8.8	5.0	4.4	4.0	10	171	497	154	42	16
9	36	17	9.6	4.8	4.6	4.2	16	171	520	153	41	14
10	33	20	9.0	4.8	4.4	4.4	21	164	450	152	40	12
11	32	18	9.4	4.8	4.2	6.4	26	152	323	130	37	12
12	32	21	9.4	4.6	4.2	5.0	31	111	273	128	41	20
13	34	19	9.2	4.2	4.4	4.4	39	90	301	182	37	17
14	36	16	9.0	4.2	4.2	4.2	46	77	327	138	32	13
15	32	12	9.2	4.2	4.0	4.4	56	77	318	109	29	13
16	33	11	9.4	4.4	4.0	4.6	66	89	347	113	26	18
17	36	14	9.2	4.6	3.8	5.2	73	94	344	100	24	15
18	32	11	9.0	4.6	3.6	4.0	83	103	338	101	23	12
19	35	10	9.4	4.8	3.4	3.4	80	112	285	113	23	12
20	30	9.6	9.0	4.8	3.6	4.2	52	98	279	166	22	12
21	27	9.4	9.0	4.8	3.8	4.0	43	99	295	150	21	11
22	25	9.6	8.6	4.6	3.6	3.8	38	100	285	324	21	14
23	27	9.4	8.4	4.6	3.6	3.4	38	121	254	171	20	17
24	26	9.6	9.0	4.2	3.4	2.9	38	170	233	173	19	16
25	29	9.6	8.8	4.2	4.0	2.9	34	212	316	146	18	15
26	30	9.6	9.0	4.4	4.0	4.0	32	188	249	112	16	14
27	26	9.0	9.2	4.6	3.8	5.0	32	174	156	103	15	15
28	30	9.2	9.2	4.8	4.0	4.4	47	228	131	92	16	24
29	22	9.4	9.0	4.6	---	4.5	54	249	156	85	16	24
30	22	9.4	8.8	4.4	---	5.0	58	238	153	77	16	18
31	23	---	9.0	4.2	---	6.0	---	192	---	71	15	---
TOTAL	949	439.8	278.8	143.2	112.0	131.7	1067.3	4459	8622	4390	1008	497
MEAN	30.6	14.7	8.99	4.62	4.00	4.25	35.6	144	287	142	32.5	16.6
MAX	43	26	9.6	7.4	4.6	6.4	83	249	520	324	68	28
MIN	22	9.0	8.4	4.0	3.4	2.9	5.0	77	131	71	15	11
AC-FT	1880	872	553	284	222	261	2120	8840	17100	8710	2000	986

CAL YR 1984 TOTAL 31135.7 MEAN 85.1 MAX 568 MIN 2.5 AC-FT 61760
WTR YR 1985 TOTAL 22097.8 MEAN 60.5 MAX 520 MIN 2.9 AC-FT 43830

09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO

LOCATION.--Lat 39°37'33", long 106°16'39", in NE¼NW¼ sec.18, T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on right bank 10 ft downstream from bridge pier on Interstate 70, 0.2 mi upstream from Black Gore Creek, 4.4 mi east of Vail, and 8.4 mi northeast of Minturn.

DRAINAGE AREA.--14.3 mi².

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,600 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1947 to Sept. 30, 1956, Oct. 1, 1963 to Sept. 30, 1980, at various sites about 1200 ft upstream at different datums. See WRD-CO-80-2 for history of changes prior to Oct. 1, 1980.

REMARKS.--Estimated daily discharges: Oct. 1-10, Oct. 17 to Nov. 13 Jan. 2 to April 17. Records good, except for estimated daily discharges, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--31 years, 30.5 ft³/s; 22,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 662 ft³/s, June 24, 1983, gage height, 2.60 ft, from rating curve extended above 140 ft³/s; maximum gage height, 6.65 ft, June 18, 1951, datum then in use; minimum daily discharge, 1.2 ft³/s, Mar. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than above base discharge of 200 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	0100	*558	*2.27	No other peak greater than base discharge.			

Minimum daily discharge, 6.0 ft³/s, Feb. 2-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	17	9.1	8.4	8.0	11	10	39	158	76	38	16
2	20	17	8.8	8.4	6.0	11	10	55	176	83	39	16
3	21	17	8.7	8.4	6.0	11	10	68	212	82	36	17
4	21	17	8.0	8.4	6.0	11	10	81	213	81	34	17
5	21	17	8.0	8.4	6.0	11	10	89	232	79	30	17
6	21	17	8.0	8.4	6.2	11	11	85	269	78	29	16
7	21	17	8.5	8.4	6.4	11	12	76	366	68	28	16
8	21	17	8.5	8.4	7.0	11	14	97	443	62	27	16
9	21	17	8.8	8.4	7.6	11	16	103	211	64	27	16
10	21	17	8.8	8.4	8.2	11	18	94	268	61	27	14
11	20	17	9.0	9.0	9.0	11	21	94	190	61	27	14
12	21	17	9.2	9.0	9.4	12	23	71	208	61	30	14
13	22	17	8.8	9.0	10	13	26	61	224	64	29	16
14	23	18	9.4	9.0	10	14	30	51	234	54	26	15
15	20	18	9.8	9.0	11	15	33	49	235	46	26	14
16	19	19	9.6	9.0	11	15	37	51	238	43	23	14
17	19	16	10	9.0	11	15	42	54	227	40	23	14
18	19	16	9.5	9.0	11	15	51	65	221	46	23	14
19	19	16	9.5	9.0	11	15	49	71	169	50	21	14
20	19	18	9.1	9.0	11	15	34	64	180	62	20	14
21	19	18	9.1	9.0	11	15	23	61	198	54	20	14
22	19	14	9.1	9.0	11	15	16	59	152	62	20	13
23	19	12	9.1	9.0	11	15	13	67	134	61	20	13
24	19	11	9.1	9.0	11	15	12	97	135	53	20	13
25	19	11	8.8	9.0	11	15	11	126	158	47	20	13
26	19	11	8.8	9.0	11	13	10	125	110	47	18	13
27	19	10	8.8	9.0	11	12	10	151	85	47	18	13
28	19	10	8.8	9.0	11	11	14	192	83	44	18	13
29	18	10	8.8	9.0	---	10	20	197	85	41	17	13
30	18	9.6	8.4	9.0	---	10	23	209	83	40	17	13
31	18	---	8.4	9.0	---	10	---	185	---	39	17	---
TOTAL	615	458.6	276.3	273.0	259.8	391	619	2887	5897	1796	768	435
MEAN	19.8	15.3	8.91	8.81	9.28	12.6	20.6	93.1	197	57.9	24.8	14.5
MAX	23	19	10	9.0	11	15	51	209	443	83	39	17
MIN	18	9.6	8.0	8.4	6.0	10	10	39	83	39	17	13
AC-FT	1220	910	548	541	515	776	1230	5730	11700	3560	1520	863

CAL YR 1984 TOTAL 17203.2 MEAN 47.0 MAX 310 MIN 2.0 AC-FT 34120
WTR YR 1985 TOTAL 14675.7 MEAN 40.2 MAX 443 MIN 6.0 AC-FT 29110

NOTE.--NO GAGE-HEIGHT RECORD JAN. 6 TO APR. 17.

09066000 BLACK GORE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°35'47", long 106°15'52", Eagle County, Hydrologic Unit 14010003, on right bank 200 ft from U.S. Highway 6, 0.3 mi upstream from Timber Creek, 2.5 mi upstream from mouth, and 9 mi east of Minturn.

DRAINAGE AREA.--11.8 mi².

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,150 ft above National Geodetic Vertical Datum of 1925, from topographic map. Prior to October 1963, at site 15 ft upstream, at present datum.

REMARKS.--Estimated daily discharges: Nov. 5, 10-12, Nov. 16 to April 17. Records good except for estimated daily discharges, which are poor. No diversion above station. Natural regulation by two small recreation lakes above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--31 years, 17.5 ft³/s; 12,680 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 365 ft³/s, June 7, 1952, gage height, 5.42 ft; maximum gage height, 6.00 ft, Mar. 30, 1968 (backwater from ice); minimum daily discharge, 0.90 ft³/s, Feb. 22, 1968, Jan. 30, 1970, Feb. 4 to Mar. 6, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	1800	*269	*4.69	No other peak greater than base discharge.			

Minimum daily, 3.0 ft³/s, Jan. 17-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	9.8	10	7.2	3.5	9.3	12	40	107	41	16	8.9
2	9.5	10	10	7.2	3.5	9.3	12	49	109	37	19	9.2
3	9.5	9.2	10	6.0	3.5	9.3	13	60	112	32	16	9.5
4	9.9	9.2	10	5.4	3.5	9.3	14	74	117	30	14	10
5	13	11	10	5.4	3.5	9.3	15	73	122	28	14	9.5
6	13	9.2	10	5.4	3.5	9.3	16	67	145	27	14	8.6
7	11	8.6	10	5.4	3.5	9.3	17	71	162	23	14	8.6
8	11	8.4	10	5.4	3.5	9.3	18	83	195	24	14	9.2
9	10	8.9	10	5.4	3.5	9.3	20	84	179	22	13	8.6
10	9.8	12	10	5.4	3.5	9.3	21	87	170	22	13	8.1
11	9.5	9.8	10	5.4	3.7	9.3	23	84	145	20	13	8.6
12	9.5	9.2	10	4.7	3.9	9.3	25	70	128	19	16	9.5
13	11	8.9	10	4.3	4.2	9.3	27	61	120	20	14	8.4
14	11	9.8	10	3.8	4.3	9.3	28	60	117	18	14	8.1
15	9.8	11	10	3.4	4.7	9.3	30	59	110	17	13	8.4
16	11	11	10	3.1	5.0	10	32	58	102	18	13	8.6
17	11	12	10	3.0	5.4	11	34	60	96	17	12	7.9
18	12	12	10	3.0	5.6	11	35	66	92	17	13	7.7
19	11	12	10	3.0	5.6	12	34	70	83	19	13	7.9
20	10	12	10	3.0	5.6	12	29	67	76	20	12	7.4
21	10	12	10	3.2	6.1	12	23	70	71	22	12	8.1
22	10	12	10	3.4	6.4	12	22	75	65	32	11	10
23	10	12	10	3.5	7.0	12	22	84	61	25	10	11
24	11	12	10	3.5	7.4	12	21	102	60	21	10	9.9
25	13	12	10	3.5	8.0	12	22	110	62	20	9.5	9.2
26	13	12	9.6	3.5	8.4	12	22	106	57	19	9.2	8.9
27	12	12	8.4	3.5	9.0	12	22	113	50	18	9.2	8.9
28	11	11	7.2	3.5	9.2	12	22	132	46	17	9.2	11
29	10	11	7.2	3.5	---	12	23	141	45	17	9.2	12
30	10	10	7.2	3.5	---	12	30	136	43	17	8.9	11
31	9.5	---	7.2	3.5	---	12	---	120	---	16	8.6	---
TOTAL	331.8	320.0	296.8	133.0	144.5	327.5	684	2532	3047	695	386.8	272.7
MEAN	10.7	10.7	9.57	4.29	5.16	10.6	22.8	81.7	102	22.4	12.5	9.09
MAX	13	12	10	7.2	9.2	12	35	141	195	41	19	12
MIN	9.5	8.4	7.2	3.0	3.5	9.3	12	40	43	16	8.6	7.4
AC-FT	658	635	589	264	287	650	1360	5020	6040	1380	767	541

CAL YR 1984 TOTAL 11390.6 MEAN 31.1 MAX 208 MIN 2.5 AC-FT 22590
WTR YR 1985 TOTAL 9171.1 MEAN 25.1 MAX 195 MIN 3.0 AC-FT 18190

NOTE.--NO GAGE-HEIGHT RECORD NOV. 16 TO APRIL 17.

09066100 BIGHORN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'24", long 106°17'34", in N½ sec.12, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 0.3 mi upstream from U.S. Highway 6, 0.4 mi upstream from mouth, 4.5 mi east of Vail, and 8.5 mi northeast of Minturn.

DRAINAGE AREA.--4.37 mi^2.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,625 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 6 to April 17. Records good, except for estimated daily discharges, which are poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 10.0 ft^3/s; 7,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 338 ft^3/s, June 8, 1985, gage height, 4.10 ft, from rating curve extended above 82 ft^3/s; maximum gage height, 4.26 ft, June 8, 1985 (backwater from debris); minimum daily discharge determined, 0.10 ft^3/s, Feb. 8, 1967, Jan. 30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 8	2000	*338	4.10	June 8	1930	-	a*4.26

Minimum daily discharge, 1.40 ft^3/s Dec. 28-31, Jan. 1.
a-Backwater from debris.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	4.8	2.7	1.4	1.5	2.4	2.4	26	29	24	11	4.8
2	7.2	4.8	2.7	1.5	1.5	2.4	2.4	33	34	26	10	4.7
3	6.9	4.5	2.7	1.5	1.5	2.4	2.4	40	38	26	9.8	5.0
4	7.5	4.3	2.7	1.5	1.5	2.4	2.4	41	40	27	9.6	6.5
5	8.7	4.8	2.7	1.5	1.7	2.4	2.4	46	47	27	9.0	5.2
6	10	5.2	2.7	1.5	1.9	2.4	2.4	42	60	24	7.5	4.4
7	11	5.4	2.7	1.5	1.9	2.4	2.4	39	75	23	7.3	4.3
8	11	5.4	2.7	1.5	1.9	2.4	2.4	50	143	21	7.5	4.6
9	8.7	5.4	2.7	1.5	1.9	2.4	3.0	45	167	20	8.1	4.1
10	11	5.4	2.7	1.5	1.9	2.4	4.0	39	119	19	7.2	4.0
11	9.6	5.4	2.7	1.5	1.9	2.4	5.0	36	91	17	6.5	4.0
12	9.6	5.4	2.7	1.5	1.9	2.4	6.0	29	85	17	7.2	5.0
13	9.6	5.4	2.7	1.5	1.9	2.4	7.4	24	88	19	5.7	4.3
14	9.6	5.4	2.7	1.5	2.0	2.4	10	21	84	15	5.5	4.0
15	8.7	5.4	2.7	1.5	2.1	2.4	13	21	92	13	5.1	4.7
16	7.8	5.4	2.7	1.5	2.1	2.2	17	23	98	13	4.8	5.2
17	8.1	5.4	2.7	1.5	2.2	2.2	21	24	83	13	4.8	4.4
18	7.5	5.4	2.7	1.5	2.3	2.2	23	27	67	13	4.8	4.3
19	7.5	5.4	2.7	1.5	2.4	2.2	23	27	61	14	4.6	4.4
20	6.6	5.4	2.7	1.5	2.5	2.2	19	24	61	18	5.0	4.5
21	6.1	4.5	2.7	1.5	2.4	2.2	15	24	65	19	4.9	4.6
22	5.7	4.0	2.7	1.5	2.4	2.2	12	24	57	21	5.1	5.2
23	5.5	3.7	2.7	1.5	2.4	2.2	11	30	51	20	5.0	5.1
24	5.7	3.7	2.7	1.5	2.4	2.2	11	44	48	18	4.0	4.8
25	5.9	3.7	2.7	1.5	2.4	2.2	10	47	58	16	4.0	4.8
26	5.5	3.7	2.7	1.5	2.4	2.2	9.6	45	38	14	4.0	5.2
27	5.0	3.6	2.5	1.5	2.4	2.2	10	48	28	14	3.7	5.4
28	5.0	3.0	1.4	1.5	2.4	2.2	14	59	27	13	3.7	5.9
29	4.8	2.8	1.4	1.5	---	2.2	18	58	29	11	4.0	6.1
30	4.8	2.8	1.4	1.5	---	2.2	19	46	26	11	3.8	6.4
31	4.8	---	1.4	1.5	---	2.2	---	35	---	11	4.3	---
TOTAL	232.6	139.5	78.3	46.4	57.7	71.2	300.2	1117	1989	557	187.5	145.9
MEAN	7.50	4.65	2.53	1.50	2.06	2.30	10.0	36.0	66.3	18.0	6.05	4.86
MAX	11	5.4	2.7	1.5	2.5	2.4	23	59	167	27	11	6.5
MIN	4.8	2.8	1.4	1.4	1.5	2.2	2.4	21	26	11	3.7	4.0
AC-FT	461	277	155	92	114	141	595	2220	3950	1100	372	289

CAL YR 1984 TOTAL 7039.50 MEAN 19.2 MAX 131 MIN .40 AC-FT 13960
WTR YR 1985 TOTAL 4922.3 MEAN 13.5 MAX 167 MIN 1.4 AC-FT 9760

NOTE.--NO GAGE-HEIGHT RECORD NOV. 6 TO APRIL 17.

09066150 PITKIN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'37", long 106°18'07", in SW¼SW¼ sec.1, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 100 ft downstream from Pitkin ditch headgate, 1,000 ft upstream from U.S. Highway 6, 1,200 ft upstream from mouth, 4.0 mi east of Vail, and 8 mi northeast of Minturn.

DRAINAGE AREA.--5.39 mi².

PERIOD OF RECORD.--Annual maximum and occasional low-flow measurements water years 1965-66. October 1966 to current year.

REVISED RECORDS.--WRD Colo. 1971: 1967-70.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,525 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, crest-stage gage at datum 0.98 ft, lower.

REMARKS.--Estimated daily discharges: Nov. 10 to Apr. 3. Records good, except for estimated daily discharges, which are poor. Diversions above station by Pitkin ditch for irrigation downstream. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 12.4 ft³/s; 8,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 265 ft³/s, June 8, 1985, gage height, 2.85 ft; maximum gage height, 3.60 ft, June 21, 1983 (backwater from debris); minimum daily discharge, 0.24 ft³/s, Oct. 29 to Nov. 1, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	2330	a*265	b*3.38	July 19	2100	77	2.36
				July 26	1800	101	2.42

a-About.
b-Backwater from debris.
Minimum daily discharge, 1.3 ft³/s, Jan. 2-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	5.0	2.8	2.0	1.4	3.8	4.0	13	41	35	22	3.3
2	9.9	4.2	3.0	2.0	1.3	3.8	3.9	24	52	44	21	3.6
3	9.9	4.6	3.0	2.0	1.3	3.8	3.7	35	63	44	18	3.9
4	9.9	4.2	3.0	2.0	1.3	4.0	3.5	41	61	48	16	4.8
5	13	4.2	3.0	2.0	1.6	4.3	3.2	44	77	50	12	4.2
6	16	4.2	3.0	2.0	1.9	4.5	2.7	40	83	46	12	3.9
7	17	4.2	3.0	2.0	2.3	4.5	2.3	36	111	41	11	3.3
8	14	3.9	3.0	2.0	2.5	4.5	2.2	44	154	36	11	3.3
9	14	3.9	3.0	2.0	2.5	4.5	2.1	44	153	36	10	3.3
10	13	3.9	3.0	2.0	2.5	4.5	1.9	38	129	35	9.3	3.3
11	12	3.5	3.0	1.7	2.5	4.0	2.1	36	115	26	8.6	3.3
12	12	3.4	3.0	1.5	2.5	3.8	2.9	28	111	30	11	3.9
13	11	3.0	3.0	1.5	2.5	3.5	3.1	22	115	36	8.0	3.6
14	11	2.8	3.0	1.5	2.5	3.5	4.6	14	122	28	6.7	3.3
15	9.9	2.6	3.0	1.5	2.5	3.5	7.4	12	122	21	6.0	3.9
16	8.6	2.6	3.0	1.5	2.5	3.5	10	12	122	19	6.0	3.9
17	8.6	2.6	3.0	1.5	2.5	3.5	11	14	115	26	5.1	3.6
18	8.6	2.5	3.0	1.5	2.5	3.5	14	17	111	26	4.9	3.3
19	8.6	2.5	3.0	1.5	2.5	3.5	14	19	101	36	5.1	3.3
20	8.0	2.5	3.0	1.5	2.7	3.5	11	18	98	51	4.8	3.0
21	7.4	2.5	3.0	1.5	3.0	3.5	9.3	18	108	57	5.0	3.0
22	6.9	2.5	3.0	1.5	3.3	3.5	8.0	18	98	57	4.8	3.9
23	6.4	2.5	3.0	1.5	3.5	3.5	6.7	26	83	52	4.8	3.6
24	6.4	2.5	3.0	1.5	3.8	3.5	5.4	49	74	48	4.5	3.3
25	6.4	2.5	3.0	1.5	3.8	3.5	5.1	57	94	36	4.2	3.0
26	5.9	2.5	2.8	1.5	3.8	3.9	4.8	52	66	43	3.9	3.3
27	5.9	2.5	2.5	1.5	3.8	4.0	3.9	57	38	48	3.9	3.9
28	5.9	2.5	2.3	1.5	3.8	4.0	4.5	68	38	35	3.9	3.9
29	5.9	2.5	2.2	1.5	---	4.0	6.0	77	44	29	3.6	4.8
30	5.4	2.5	2.1	1.5	---	4.0	8.0	66	38	28	3.3	3.9
31	5.4	---	2.0	1.5	---	4.0	---	50	---	24	3.3	---
TOTAL	292.2	95.3	88.7	51.7	72.6	119.4	171.3	1089	2737	1171	253.7	108.6
MEAN	9.43	3.18	2.86	1.67	2.59	3.85	5.71	35.1	91.2	37.8	8.18	3.62
MAX	17	5.0	3.0	2.0	3.8	4.5	14	77	154	57	22	4.8
MIN	5.4	2.5	2.0	1.5	1.3	3.5	1.9	12	38	19	3.3	3.0
AC-FT	580	189	176	103	144	237	340	2160	5430	2320	503	215

CAL YR 1984	TOTAL	8416.76	MEAN	23.0	MAX	133	MIN	.40	AC-FT	16690
WTR YR 1985	TOTAL	6250.5	MEAN	17.1	MAX	154	MIN	1.3	AC-FT	12400

NOTE.--NO GAGE-HEIGHT RECORD NOV. 10 TO APR. 3.

09066200 BOOTH CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'54", long 106°19'21", at NE¼SE¼ of sec.3, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on center bridge pier 100 ft upstream from U.S. Highway 6, 0.4 mi upstream from mouth, 3.0 mi northeast of Vail, and 7.0 mi northeast of Minturn.

DRAINAGE AREA.--6.03 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,325 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 4, 1984, gage at site 1,000 ft upstream at different datum (gage destroyed by rock slide).

REMARKS.--Estimated daily discharges: Jan. 24-28, Apr. 4-16, June 13 to July 17. Records fair, except for estimated daily discharges, which are poor. No diversion or regulation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 12.6 ft^3/s; 9,130 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 355 ft^3/s, June 15, 1978, gage height, 4.07 ft; maximum gage height, 4.62 ft, June 18, 1983 (backwater from debris); minimum daily discharge, 0.20 ft^3/s, Feb. 8, 1967, Jan. 29, 1970, Feb. 10-11, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun. 8	0900	*235	*3.85	No other peak greater than base discharge.			

Minimum daily, 1.7 ft^3/s, Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	8.3	4.2	2.4	2.3	3.5	4.1	25	29	26	12	3.2
2	7.4	8.3	4.1	2.8	2.3	3.5	6.1	35	40	28	12	3.4
3	7.1	8.3	3.9	2.8	2.3	3.6	7.7	38	36	30	11	3.3
4	7.4	8.2	3.9	2.8	2.4	3.7	7.8	41	38	30	10	4.7
5	8.8	8.2	4.0	2.8	2.4	3.7	8.0	42	48	28	9.0	3.2
6	9.4	8.1	4.0	2.5	2.4	3.7	8.2	36	70	26	8.7	2.7
7	9.9	8.0	4.0	2.4	2.3	3.7	8.4	38	57	24	8.1	2.5
8	9.2	7.9	4.0	2.4	2.5	3.7	8.6	46	99	23	7.8	2.7
9	9.0	7.9	4.1	2.4	2.5	3.9	8.8	39	125	21	7.8	2.3
10	8.8	8.2	4.1	2.4	2.6	4.1	9.8	41	90	19	7.3	2.2
11	8.5	8.1	4.0	2.4	2.7	4.5	11	34	79	18	7.2	2.2
12	8.2	7.9	4.1	2.5	2.6	4.5	12	28	77	20	8.6	2.3
13	8.5	8.0	3.8	2.8	2.8	4.5	14	22	80	19	7.2	1.9
14	8.5	9.3	3.7	2.8	2.8	4.5	15	20	86	18	6.5	1.9
15	8.2	8.9	3.5	2.8	3.0	4.7	17	21	92	15	5.3	2.3
16	8.6	7.0	3.5	2.6	3.4	4.9	19	21	100	14	5.1	2.8
17	8.6	8.6	3.7	2.5	3.6	5.0	22	25	88	13	5.2	1.9
18	8.4	8.1	3.6	2.5	3.9	5.4	22	27	74	14	5.3	1.8
19	8.4	7.3	3.5	2.5	3.5	5.5	20	24	64	15	5.1	1.8
20	8.1	6.2	3.4	2.5	3.6	5.5	19	22	70	21	4.8	1.7
21	8.0	5.2	3.4	2.6	3.5	5.7	13	22	62	21	5.2	1.8
22	7.9	5.2	3.6	2.6	3.5	6.2	9.9	24	56	24	5.6	2.3
23	7.9	5.7	3.5	2.4	3.4	5.1	8.3	36	50	21	5.5	2.3
24	7.9	6.2	3.2	2.4	3.4	5.4	7.6	53	58	22	5.0	2.2
25	8.0	6.0	3.1	2.3	3.3	6.6	6.8	41	54	19	4.7	1.8
26	8.1	5.9	2.9	2.2	3.3	6.8	7.1	45	45	18	4.5	1.8
27	8.3	5.5	2.9	2.1	3.4	6.9	12	55	35	17	4.1	2.9
28	8.3	5.5	2.9	2.1	3.5	8.7	18	64	28	14	4.1	3.6
29	8.1	4.9	2.9	2.2	---	6.3	17	61	30	13	3.8	4.4
30	8.2	4.3	2.0	2.2	---	5.6	19	45	27	13	3.6	3.8
31	8.3	---	2.3	2.2	---	4.0	---	31	---	12	3.4	---
TOTAL	257.3	215.2	109.8	76.9	83.2	153.4	367.2	1102	1887	616	203.5	77.7
MEAN	8.30	7.17	3.54	2.48	2.97	4.95	12.2	35.5	62.9	19.9	6.56	2.59
MAX	9.9	9.3	4.2	2.8	3.9	8.7	22	64	125	30	12	4.7
MIN	7.1	4.3	2.0	2.1	2.3	3.5	4.1	20	27	12	3.4	1.7
AC-FT	510	427	218	153	165	304	728	2190	3740	1220	404	154

CAL YR 1984	TOTAL	7143.7	MEAN	19.5	MAX	138	MIN	1.0	AC-FT	14170
WTR YR 1985	TOTAL	5149.2	MEAN	14.1	MAX	125	MIN	1.7	AC-FT	10210

NOTE.--NO GAGE-HEIGHT RECORD JUNE 13 TO JULY 17.

09066300 MIDDLE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'45", long 106°22'54", in sec.6, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 200 ft upstream from Interstate Highway 70, 0.2 mi upstream from mouth, and 5.0 mi northeast of Minturn.

DRAINAGE AREA.--5.97 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1977 at site 700 ft upstream, at different datum.

REMARKS.--Estimated daily discharges: Nov. 11 to Apr. 17. Records good, except for estimated daily discharges, which are poor. No diversion or regulation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 6.23 ft³/s; 4,510 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 116 ft³/s, June 20, 1974, gage height, 2.65 ft, datum then in use; maximum gage height, 3.28 ft, June 25, 1983, backwater from debris; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	2000	*74	*2.97	No other peak greater than base discharge.			

Minimum daily, 0.60 ft³/s, Jan. 31, Feb. 1-2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.0	1.6	1.2	.60	1.8	2.5	11	31	18	9.7	2.4
2	4.0	3.0	1.6	1.2	.60	1.8	2.5	12	30	17	9.4	2.9
3	4.0	2.9	1.6	1.2	.80	1.8	2.5	14	32	16	8.6	2.7
4	4.0	2.7	1.6	1.2	1.0	1.8	2.5	16	30	16	8.4	4.0
5	5.2	2.9	1.6	1.2	1.2	1.8	2.6	20	31	15	8.1	2.9
6	4.9	2.7	1.6	1.2	1.6	1.8	2.8	22	35	15	8.1	2.6
7	4.4	2.6	1.6	1.2	1.8	1.8	3.3	22	43	15	7.4	2.5
8	4.2	2.6	1.6	1.2	1.8	1.8	3.5	23	55	14	6.8	2.7
9	4.2	2.5	1.6	1.2	1.8	1.8	4.0	24	58	14	6.8	2.5
10	4.0	2.6	1.6	1.2	1.8	1.8	4.5	25	55	14	6.5	2.4
11	4.0	2.6	1.2	1.0	1.8	1.8	5.2	25	50	13	6.4	2.5
12	4.0	2.5	1.2	1.0	1.8	1.8	5.6	25	45	13	7.3	3.3
13	4.4	2.4	1.2	1.0	1.8	1.8	6.2	23	42	13	6.3	2.7
14	4.2	2.3	1.2	1.0	1.8	1.8	7.0	21	41	12	5.7	2.6
15	3.7	2.2	1.2	1.0	1.8	2.0	7.8	20	41	12	5.5	3.0
16	3.8	2.2	1.2	1.0	1.8	2.3	8.4	20	43	12	5.3	3.3
17	4.2	2.2	1.2	1.0	1.8	2.5	9.0	20	40	12	4.9	2.6
18	4.0	2.2	1.2	1.0	1.8	2.5	9.7	21	39	12	4.5	2.6
19	4.0	2.2	1.2	1.0	1.8	2.5	10	22	36	12	4.5	2.6
20	4.0	2.2	1.2	1.0	1.8	2.5	10	21	35	14	4.2	2.5
21	3.8	2.0	1.2	1.0	1.8	2.5	9.4	22	35	13	3.9	2.5
22	3.7	1.6	1.2	1.0	1.8	2.5	9.1	22	32	13	3.8	3.0
23	3.7	1.6	1.2	1.0	1.8	2.5	8.6	22	29	12	3.7	3.0
24	3.5	1.6	1.2	1.0	1.8	2.5	8.4	24	27	13	3.3	3.2
25	3.5	1.6	1.2	1.0	1.8	2.5	8.4	27	27	12	3.3	2.9
26	3.5	1.6	1.2	1.0	1.8	2.5	7.8	27	24	13	3.0	2.9
27	3.3	1.6	1.2	1.0	1.8	2.5	7.6	32	22	13	2.7	3.0
28	3.3	1.6	1.2	1.0	1.8	2.5	8.4	37	20	12	2.7	3.3
29	3.3	1.6	1.2	1.0	---	2.5	9.1	39	18	11	2.6	3.2
30	3.2	1.6	1.2	.80	---	2.5	9.4	39	17	11	2.5	3.0
31	3.0	---	1.2	.60	---	2.5	---	35	---	10	2.4	---
TOTAL	120.8	66.9	41.2	32.40	45.40	67.0	195.8	733	1063	412	168.3	85.3
MEAN	3.90	2.23	1.33	1.05	1.62	2.16	6.53	23.6	35.4	13.3	5.43	2.84
MAX	5.2	3.0	1.6	1.2	1.8	2.5	10	39	58	18	9.7	4.0
MIN	3.0	1.6	1.2	.60	.60	1.8	2.5	11	17	10	2.4	2.4
AC-FT	240	133	82	64	90	133	388	1450	2110	817	334	169

CAL YR 1984	TOTAL	4154.37	MEAN	11.4	MAX	65	MIN	.20	AC-FT	8240
WTR YR 1985	TOTAL	3031.10	MEAN	8.30	MAX	58	MIN	.60	AC-FT	6010

NOTE.--NO GAGE-HEIGHT RECORD NOV. 11 TO APR. 187

09066400 RED SANDSTONE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°40'58", long 106°24'03", Eagle County, Hydrologic Unit 14010003, on left bank 150 ft upstream from road culvert, 1,400 ft upstream from Indian Creek, and 6.8 mi north of Minturn.

DRAINAGE AREA.--7.27 mi².

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,212 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 24-26, Oct. 28 to Jan. 24, Jan. 25 to Feb. 14, 24-25, March 14-17, 21-24. Records good except for estimated daily discharges, which are poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 9.47 ft³/s; 6,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 215 ft³/s, June 19, 1983, gage height, 4.66 ft; minimum daily, 0.20 ft³/s, Jan. 30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 28	1800	130	4.12	June 8	2000	*158	*4.29

Minimum daily discharge, 1.4 ft³/s, Sept. 24-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	4.6	3.0	2.4	1.8	2.1	1.8	13	69	17	5.3	1.6
2	4.4	4.5	2.9	2.1	1.9	2.0	1.6	15	70	15	5.2	1.7
3	4.4	4.5	2.9	1.8	1.9	2.0	1.6	19	72	14	5.0	1.8
4	4.4	4.7	2.7	1.9	2.0	1.9	1.6	21	69	14	4.4	3.2
5	5.8	4.4	2.8	1.9	2.1	2.0	1.6	27	72	13	4.0	2.7
6	7.2	4.3	2.8	2.0	2.2	1.9	1.6	30	85	12	3.8	2.2
7	6.4	4.2	2.8	2.2	2.1	1.8	1.7	28	107	11	3.5	2.0
8	5.6	4.0	2.7	2.3	2.1	2.0	2.4	34	125	11	3.3	2.0
9	5.4	4.0	2.7	2.3	2.0	2.0	2.7	34	119	9.5	3.1	2.0
10	5.3	4.0	2.6	2.2	2.1	2.0	2.6	36	100	8.8	2.9	2.1
11	5.1	4.0	2.5	2.2	2.2	1.8	2.9	33	84	8.2	2.8	2.1
12	5.0	3.9	2.4	2.2	2.3	1.8	4.3	27	72	7.4	4.0	2.7
13	5.2	3.8	2.5	2.3	2.3	2.0	4.4	28	66	7.6	3.2	2.5
14	6.1	3.9	2.6	2.3	2.3	2.0	5.7	29	65	6.8	2.9	2.0
15	4.6	4.2	2.7	2.3	2.3	2.0	7.2	29	63	6.0	2.7	1.8
16	8.4	4.0	2.6	2.2	2.3	2.1	8.4	28	60	5.3	2.5	1.8
17	8.2	3.8	2.4	2.2	2.5	2.0	9.1	29	56	5.2	2.4	1.6
18	6.0	3.7	2.5	2.2	2.3	2.0	9.5	29	53	6.1	2.3	1.6
19	4.6	3.5	2.7	2.1	2.3	1.9	10	32	49	6.6	2.3	1.6
20	4.2	3.4	2.6	2.2	2.1	1.8	11	32	43	8.3	2.1	1.5
21	4.2	3.5	2.5	2.3	2.1	1.8	11	31	40	11	2.1	1.5
22	4.2	3.5	2.3	2.2	2.1	1.8	9.6	32	37	9.8	2.1	1.5
23	4.3	3.4	2.3	2.1	2.1	1.8	8.7	40	33	8.6	1.9	1.5
24	4.3	3.4	2.4	2.1	2.1	1.8	8.6	46	31	9.0	1.8	1.4
25	4.2	3.3	2.6	2.1	2.1	1.8	8.4	52	31	8.1	1.6	1.4
26	4.3	3.2	2.6	2.1	2.1	1.8	8.3	56	29	9.8	1.6	2.0
27	4.4	3.0	2.6	2.1	2.1	1.8	8.4	66	27	9.4	1.6	2.4
28	4.6	3.1	2.5	2.2	2.2	1.7	10	104	23	7.5	1.6	2.1
29	4.7	3.2	2.5	2.2	---	1.8	11	107	20	7.1	1.6	2.1
30	4.8	3.1	2.5	2.0	---	1.8	11	99	19	6.4	1.6	2.4
31	4.7	---	2.5	1.5	---	1.8	---	82	---	5.7	1.6	---
TOTAL	159.4	114.1	80.7	66.2	60.0	58.8	186.7	1268	1789	285.2	86.8	58.8
MEAN	5.14	3.80	2.60	2.14	2.14	1.90	6.22	40.9	59.6	9.20	2.80	1.96
MAX	8.4	4.7	3.0	2.4	2.5	2.1	11	107	125	17	5.3	3.2
MIN	4.2	3.0	2.3	1.5	1.8	1.7	1.6	13	19	5.2	1.6	1.4
AC-FT	316	226	160	131	119	117	370	2520	3550	566	172	117

CAL YR 1984 TOTAL 5398.65 MEAN 14.8 MAX 152 MIN .90 AC-FT 10710
WTR YR 1985 TOTAL 4213.7 MEAN 11.5 MAX 125 MIN 1.4 AC-FT 8360

09067000 BEAVER CREEK AT AVON, CO

LOCATION.--Lat 39°37'47", long 106°31'20", in NE¼SW¼ sec.12, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on left bank at Avon, 550 ft upstream from U.S. Highways 6 and 24, and 700 ft upstream from mouth.

DRAINAGE AREA.--15.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January to December 1911, January 1912 to September 1914 (gage heights and discharge measurements only), May 1974 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,453 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 1, 1974, nonrecording gage near present site at different datum.

REMARKS.--Estimated daily discharges: Oct. 17-19, 24-25, Nov. 4 to Dec. 25, Jan. 1-5, 12-15. Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation above and below station. Slight natural regulation by several small lakes in headwaters.

AVERAGE DISCHARGE.--11 years (water years 1975-85), 13.8 ft^3/s; 10,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 249 ft^3/s, June 27, 1983, gage height, 3.46 ft; minimum daily, 0.55 ft^3/s, Sept. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft^3/s, and maximum (*)

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 8	2300	*148	*2.94	No other peak greater than base discharge.			

Minimum daily discharge 2.3 ft^3/s, Jan. 21, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	5.7	4.0	3.3	2.7	2.9	3.0	23	41	35	12	5.0
2	8.2	5.5	3.9	3.1	2.8	2.7	3.9	31	36	34	13	5.4
3	8.3	5.4	3.9	3.3	2.8	2.8	4.2	35	39	31	12	6.2
4	9.8	5.3	3.8	3.3	2.9	2.8	3.6	44	42	30	11	8.4
5	13	5.0	3.8	3.3	2.6	3.3	3.2	49	45	29	11	6.8
6	12	5.1	3.6	3.3	2.5	2.8	3.6	43	53	27	10	6.0
7	10	5.2	3.6	3.5	2.6	2.9	4.4	41	70	26	9.8	5.4
8	9.9	5.0	3.9	3.5	2.4	3.1	5.1	46	101	24	9.3	5.5
9	9.5	5.0	4.6	3.4	2.4	3.1	5.7	45	127	22	9.4	5.1
10	9.4	4.8	4.2	3.2	2.4	3.0	6.1	50	122	21	9.3	4.8
11	8.9	4.6	4.4	3.3	2.3	3.6	6.3	48	111	21	9.7	5.1
12	9.3	4.4	4.5	3.2	2.5	3.1	7.4	42	95	19	10	5.9
13	8.9	4.3	4.4	3.0	2.6	3.1	8.3	36	96	20	9.3	5.3
14	9.4	4.3	4.3	2.9	2.6	3.5	10	30	98	17	7.9	4.6
15	5.4	4.3	4.4	2.9	2.6	3.4	13	28	101	17	7.4	4.9
16	7.9	4.8	4.5	3.0	2.6	3.4	15	27	103	20	7.1	5.3
17	8.0	4.8	4.4	3.1	2.6	3.6	17	28	103	16	7.0	5.1
18	7.6	5.0	4.2	3.0	2.6	3.7	19	28	89	17	6.7	5.0
19	7.8	4.9	4.2	2.9	2.7	4.2	19	30	87	21	7.1	5.1
20	7.9	4.8	4.0	2.6	3.1	4.1	15	27	73	21	6.9	5.1
21	7.7	4.6	4.0	2.3	2.8	3.9	13	26	79	20	6.1	5.3
22	7.6	4.7	3.4	2.7	2.6	3.6	11	28	70	24	5.8	7.6
23	7.1	4.5	3.3	2.9	2.8	3.3	10	29	62	22	5.7	6.5
24	7.0	4.4	3.4	2.8	2.8	3.6	9.3	29	54	20	5.6	6.1
25	6.8	4.3	3.4	2.8	2.7	4.1	9.8	32	69	19	5.4	6.0
26	7.0	4.1	3.6	2.6	2.8	3.8	9.6	35	63	17	5.0	5.8
27	6.9	4.1	3.5	3.0	3.0	3.2	9.7	36	50	15	4.8	6.0
28	7.0	4.1	3.6	3.1	2.9	3.4	12	38	45	14	5.3	11
29	7.3	4.0	3.6	3.1	---	3.0	14	48	43	14	5.2	8.4
30	6.2	4.0	3.5	2.7	---	3.5	18	49	38	14	5.3	6.6
31	6.0	---	3.4	2.7	---	3.0	---	46	---	12	5.2	---
TOTAL	256.3	141.0	121.3	93.8	74.7	103.5	289.2	1127	2205	659	245.3	179.3
MEAN	8.27	4.70	3.91	3.03	2.67	3.34	9.64	36.4	73.5	21.3	7.91	5.98
MAX	13	5.7	4.6	3.5	3.1	4.2	19	50	127	35	13	11
MIN	5.4	4.0	3.3	2.3	2.3	2.7	3.0	23	36	12	4.8	4.6
AC-FT	508	280	241	186	148	205	574	2240	4370	1310	487	356

CAL YR 1984 TOTAL 8349.5 MEAN 22.8 MAX 146 MIN 2.7 AC-FT 16560
WTR YR 1985 TOTAL 5495.4 MEAN 15.1 MAX 127 MIN 2.3 AC-FT 10900

09067000 BEAVER CREEK AT AVON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- January 1975 to current year.

INSTRUMENTATION.--Turbidity recorder since September 1974.

REMARKS.--Daily maximum and maximum turbidity data available in district office.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
OCT										
03...	1000	8.1	213	8.2	5.5	10.4	110	32	6.3	2.1
NOV										
29...	1100	3.9	395	8.3	.0	12.2	150	48	8.3	2.5
DEC										
13...	0900	4.5	310	8.0	.0	12.0	160	49	8.6	2.4
JAN										
21...	1500	2.4	400	8.2	1.0	12.0	190	59	11	2.7
FEB										
19...	1400	2.8	314	8.4	.0	12.3	160	47	9.7	2.6
MAR										
20...	1000	3.6	415	8.3	1.0	12.5	220	65	13	3.1
APR										
18...	1000	16	254	8.4	4.0	10.5	140	41	10	2.2
MAY										
13...	1500	37	178	8.8	5.0	9.9	94	25	7.6	2.2
JUN										
11...	1000	107	95	8.3	5.0	11.0	46	14	2.7	2.4
JUL										
18...	1000	19	146	8.2	12.5	9.0	67	19	4.7	1.8
AUG										
22...	1000	5.3	278	8.2	10.0	9.4	140	40	9.2	2.3
SEP										
17...	1200	2.2	248	8.1	8.0	9.6	130	38	8.3	2.8

DATE	SODIUM ADSORPTION RATIO	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)
OCT									
03...	.0	59	45	.70	142	.19	3.1	<.10	.100
NOV									
29...	.0	73	76	1.1	185	.25	1.9	.17	<.010
DEC									
13...	.0	77	81	1.0	186	.25	2.3	.19	<.010
JAN									
21...	.0	86	96	1.6	229	.31	1.5	.19	<.010
FEB									
19...	.0	80	77	1.7	182	.25	1.4	.20	<.010
MAR									
20...	.0	109	110	4.0	263	.36	2.6	.31	.010
APR									
18...	.0	86	41	1.4	159	.22	6.9	.48	<.010
MAY									
13...	.1	71	19	.70	110	.15	11	.32	<.010
JUN									
11...	.2	27	16	.50	53	.07	15	.25	<.010
JUL									
18...	.0	41	28	.70	85	.12	4.4	<.10	<.010
AUG									
22...	.0	68	57	1.2	160	.22	2.3	--	--
SEP									
17...	.1	67	56	1.4	159	.22	.94	<.10	<.010

09067000 BEAVER CREEK AT AVON, CO--Continued

TURBIDITY (NTU), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	15	4.0	---	---	---	---		
2			---	---	40	3.0	---	---	---	---		
3			---	---	30	25	---	---	---	---		
4			---	---	40	30	---	---	---	---		
5			---	---	---	---	---	---	---	---		
6			---	---	---	---	---	---	---	---		
7			---	---	---	---	---	---	---	---		
8			---	---	---	---	---	---	---	---		
9			---	---	---	---	---	---	---	---		
10			---	---	---	---	---	---	---	---		
11			---	---	---	---	---	---	15	6.0		
12			---	---	---	---	---	---	6.0	2.0		
13			---	---	---	---	---	---	4.0	2.0		
14			---	---	---	---	---	---	---	---		
15			---	---	---	---	---	---	---	---		
16			---	---	---	---	---	---	---	---		
17			---	---	---	---	---	---	---	---		
18			---	---	---	---	---	---	---	---		
19			---	---	---	---	---	---	---	---		
20			---	15	---	---	---	---	---	---		
21			30	20	---	---	---	---	---	---		
22			40	20	---	---	---	---	---	---		
23			35	---	---	---	30	20	---	---		
24			---	---	---	---	25	15	---	---		
25			---	---	---	---	20	15	---	---		
26			---	---	---	---	15	15	---	---		
27			---	---	---	---	15	10	---	---		
28			---	---	---	---	10	8.0	---	---		
29			30	25	---	---	9.0	5.0	---	---		
30			30	10	---	---	5.0	4.0	---	---		
31			---	---	---	---	25	4.0	---	---		
MONTH			40	10	40	3.0	30	4.0	15	2.0		

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	55	35			---	---
2	---	---	---	---	40	25	55	50			---	---
3	---	---	---	---	65	25	55	50			---	---
4	---	---	---	---	65	35	60	45			---	---
5	---	---	---	---	70	30	55	35			---	---
6	---	---	---	---	75	25	40	35			---	---
7	---	---	---	---	45	25	35	35			---	---
8	---	---	---	---	75	30	60	35			---	---
9	---	---	---	---	65	25	45	35			---	---
10	---	---	---	---	---	---	---	---			---	---
11	---	---	---	---	85	30	---	---			---	---
12	---	---	---	---	60	45	---	---			---	---
13	---	---	---	---	75	45	---	---			---	---
14	---	---	65	25	75	50	---	---			---	---
15	---	---	45	25	80	30	---	---			---	---
16	---	---	60	25	55	30	40	35			---	---
17	---	---	70	25	75	30	45	40			---	---
18	---	---	30	30	80	30	60	40			45	20
19	---	---	70	25	60	30	45	20			25	25
20	---	---	50	25	55	30	---	---			25	20
21	---	---	45	25	55	30	---	---			25	20
22	---	---	75	25	50	30	---	---			65	20
23	---	---	75	30	50	30	---	---			25	20
24	---	---	40	30	---	---	---	---			25	10
25	160	140	50	25	55	40	---	---			---	---
26	140	140	35	25	70	30	---	---			---	---
27	180	130	35	30	65	30	---	---			---	---
28	140	120	30	30	55	50	---	---			---	---
29	240	120	30	25	50	35	---	---			---	---
30	250	120	70	25	50	35	---	---			---	---
31	---	---	---	---	---	---	---	---			---	---
MONTH	250	120	75	25	85	25	60	20			65	10
YEAR	250	2.0										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

09069000 EAGLE RIVER AT GYPSUM, CO

LOCATION.--Lat 39°39'00", long 106°57'06", Eagle County, Hydrologic Unit 14010003, at bridge at Gypsum, about 400 ft upstream from Gypsum Creek, about 520 ft upstream from bridge on U.S. Highways 6 and 24, and about 550 ft upstream from gaging station.

DRAINAGE AREA.--944 mi², at gaging station.

PERIOD OF RECORD.--April 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1947 to current year.
WATER TEMPERATURE: April 1949 to current year.

REMARKS.--Records of discharge are given for Eagle River below Gypsum (station 09070000), located 550 ft, downstream from Eagle River at Gypsum (station 09069000).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,850 microsiemens Aug. 6, 1949; minimum daily, 130 microsiemens June 9, 10, 1976.
WATER TEMPERATURES: Maximum daily, 24°C Aug. 24, 1949; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,000 microsiemens Feb. 25; minimum daily, 180 microsiemens June 7, 9, 10.
WATER TEMPERATURES: Maximum daily, 20.0°C Aug. 28; minimum daily, 0.0°C on many days during November to February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	NITROGEN DISSOLVED (MG/L AS N)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
NOV										
28...	1100	309	790	8.2	1.0	10.2	--	300	87	20
MAR										
21...	1400	255	795	8.4	8.5	9.9	--	330	96	22
MAY										
23...	1300	1710	307	8.3	9.0	10.0	.80	140	42	9.0
SEP										
19...	1300	312	960	8.4	14.0	9.1	--	340	100	21

DATE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
NOV									
28...	47	1	2.2	136	190	65	.10	8.2	500
MAR									
21...	47	1	3.4	130	180	60	.20	8.4	500
MAY									
23...	12	.5	1.3	87	53	13	<.10	7.7	190
SEP									
19...	75	2	3.0	134	200	110	.20	8.7	600

DATE	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
NOV									
28...	418	.68	.30	.34	.30	<.20	.60	.040	.020
MAR									
21...	341	.67	.60	.59	1.1	.50	1.7	.580	.090
MAY									
23...	880	.26	.20	.20	.50	.60	.70	.090	.010
SEP									
19...	504	.81	.20	.18	.30	.30	.50	.050	.020

09069000 EAGLE RIVER AT GYPSUM, CO.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV 28...	1100	<1	<1	<1	69	<.5	<1	<1	2
MAR 21...	1400	<1	1	<1	61	<.5	1	<1	18
MAY 23...	1300	<1	<1	<1	70	<.5	<1	<1	10
SEP 19...	1300	<1	<1	1	66	<.5	<1	<1	2

DATE	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
NOV 28...	<1	4	1	6	1	5	240	.1	.2
MAR 21...	2	16	3	24	8	<1	270	<.1	.1
MAY 23...	<1	9	2	150	14	3	100	.1	<.1
SEP 19...	<1	1	2	13	<1	2	42	--	--

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 28...	6	1	1	<1	1	<1	110	87
MAR 21...	15	4	2	1	<1	<1	220	18
MAY 23...	6	5	<1	<1	1	<1	140	64
SEP 19...	1	<1	<1	<1	<1	<1	90	19

09069000 EAGLE RIVER AT GYPSUM, CO.--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	650	850	800	850	900	900	380	260	360	650	950
2	650	650	850	800	850	900	850	360	260	360	700	900
3	620	650	850	800	850	950	850	275	260	340	650	875
4	620	650	850	850	850	900	850	300	240	360	650	850
5	650	650	850	800	900	950	900	240	240	340	650	800
6	600	650	850	800	850	950	900	280	200	340	650	800
7	600	650	850	800	850	850	850	300	180	---	650	800
8	600	650	850	800	850	900	850	280	200	360	700	900
9	580	650	800	800	900	900	---	280	180	360	700	900
10	580	700	800	800	900	800	650	280	180	360	700	900
11	600	700	800	800	850	750	---	280	220	370	700	900
12	580	700	800	850	850	800	600	275	200	---	700	950
13	600	750	850	850	900	950	---	300	240	320	700	950
14	600	750	850	850	900	900	500	300	220	380	800	950
15	580	720	850	850	850	900	420	325	240	400	800	950
16	580	750	850	800	850	900	---	375	240	---	750	950
17	580	780	800	850	900	900	380	375	260	420	800	950
18	600	780	800	800	850	850	360	350	240	---	850	950
19	600	780	800	850	850	850	340	350	---	320	900	900
20	580	800	800	800	850	850	---	---	260	300	---	950
21	600	800	800	850	850	800	---	---	240	300	---	1000
22	600	800	800	900	850	900	480	---	240	280	---	1000
23	650	800	850	850	850	950	460	320	---	400	850	850
24	650	800	850	850	950	950	470	---	240	360	850	900
25	620	750	900	850	1000	950	460	---	240	360	900	900
26	600	750	900	800	950	850	---	---	---	360	950	900
27	600	750	850	800	950	850	---	260	240	380	900	850
28	600	800	850	800	900	850	460	---	280	---	950	800
29	650	800	850	800	---	850	450	260	280	650	---	800
30	620	800	850	800	---	850	440	260	280	580	950	800
31	650	---	850	850	---	850	---	260	---	600	950	---
MEAN	609	730	837	823	879	881	610	303	236	383	778	896

WTR YR 1985 MEAN 678 MAX 1000 MIN 180

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.0	6.0	.0	.0	.0	2.0	6.0	10.0	8.0	16.0	19.0	19.0
2	11.0	6.0	.0	.0	.0	3.0	7.0	11.0	10.0	16.0	19.0	19.0
3	11.0	6.0	.0	.0	.0	3.0	8.0	8.0	10.0	15.0	19.0	19.0
4	11.0	6.0	.0	.0	.0	2.0	8.0	6.0	11.0	16.0	19.0	18.0
5	11.0	6.0	.0	.0	.0	3.0	9.0	5.0	11.0	15.0	19.0	17.0
6	10.0	6.0	.0	.0	.0	3.0	9.0	6.0	12.0	15.0	19.0	17.0
7	10.0	6.0	.0	.0	.0	2.0	9.0	6.0	11.0	---	19.0	17.0
8	10.0	6.0	.0	.0	.0	3.0	11.0	8.0	11.0	17.0	19.0	16.0
9	10.0	6.0	.0	.0	.0	3.0	---	9.0	11.0	17.0	19.0	16.0
10	9.0	5.0	.0	.0	.0	3.0	11.0	9.0	12.0	17.0	19.0	16.0
11	8.0	5.0	.0	.0	.0	4.0	---	8.0	11.0	17.0	19.0	15.0
12	8.0	5.0	.0	.0	.0	5.0	11.0	7.0	11.0	---	19.0	14.0
13	7.0	5.0	.0	.0	.0	7.0	---	8.0	12.0	18.0	17.0	14.0
14	6.0	5.0	.0	.0	.0	7.0	10.0	8.0	12.0	18.0	18.0	14.0
15	4.0	4.0	.0	.0	.0	8.0	11.0	9.0	12.0	18.0	18.0	14.0
16	4.0	4.0	.0	.0	.0	8.0	---	10.0	12.0	---	19.0	14.0
17	4.0	3.0	.0	.0	1.0	8.0	10.0	12.0	12.0	18.0	18.0	13.0
18	6.0	2.0	1.0	.0	1.0	8.0	9.0	7.0	12.0	---	19.0	13.0
19	6.0	2.0	1.0	.0	1.0	9.0	5.0	8.0	---	16.0	19.0	15.0
20	6.0	1.0	1.0	.0	1.0	9.0	---	---	---	17.0	---	14.0
21	7.0	1.0	.0	.0	1.0	8.0	---	---	---	17.0	---	14.0
22	7.0	.0	.0	.0	1.0	7.0	8.0	---	---	15.0	---	14.0
23	6.0	.0	.0	.0	2.0	7.0	8.0	12.0	---	18.0	19.0	12.0
24	6.0	.0	.0	.0	2.0	7.0	8.0	---	---	16.0	19.0	11.0
25	6.0	1.0	.0	.0	3.0	7.0	9.0	---	---	16.0	19.0	11.0
26	6.0	1.0	.0	.0	3.0	5.0	---	---	---	16.0	19.0	11.0
27	6.0	1.0	.0	.0	3.0	4.0	---	11.0	11.0	17.0	19.0	11.0
28	6.0	.0	1.0	.0	2.0	4.0	10.0	---	13.0	---	20.0	11.0
29	5.0	.0	1.0	.0	---	4.0	10.0	8.0	13.0	19.0	---	11.0
30	5.0	.0	1.0	.0	---	4.0	12.0	9.0	13.0	18.0	19.0	10.0
31	5.0	---	1.0	.0	---	4.0	---	8.0	---	19.0	19.0	---
MEAN	7.5	3.5	.0	.0	1.0	5.0	9.0	8.5	11.5	17.0	19.0	14.5

WTR YR 1985 MEAN 7.5 MAX 20.0 MIN .0

09070000 EAGLE RIVER BELOW GYPSUM, CO

LOCATION.--Lat 39°38'58", long 106°57'11", in SW¼NW¼ sec.5, T.5 S., R.85W., Eagle County, Hydrologic Unit 14010003, on right bank 30 ft downstream from bridge on U.S. Highways 6 and 24 at Gypsum and 150 ft downstream from Gypsum Creek.

DRAINAGE AREA.--944 mi^2.

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,275.11 ft, above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Feb. 1-3. Records good. Transmountain diversions above station (see elsewhere in this report). Transbasin diversions above station from Robinson Reservoir, capacity, 2,520 acre-ft, to Tenmile Creek for mining development. Many small diversions for irrigation of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--39 years, 584 ft^3/s; 423,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,020 ft^3/s, May 25, 1984, gage height, 9.46 ft; minimum daily, 110 ft^3/s, Feb. 21, 1955, Feb. 3, 1956, Dec. 26, 27, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 9	0800	*6,030	*8.93	No other peak greater than base discharge.			

Minimum daily, 135 ft^3/s, Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	486	468	321	244	190	198	220	1260	2470	1300	642	256
2	483	444	280	159	170	203	247	1450	2360	1280	632	286
3	475	455	242	135	190	204	312	1770	2620	1290	614	298
4	477	434	260	162	209	186	322	2100	2620	1280	570	329
5	560	410	243	194	216	175	259	2340	2820	1270	536	345
6	600	438	225	206	215	206	259	2240	3160	1210	509	311
7	574	429	232	231	211	206	279	2110	3550	1160	473	287
8	548	430	261	265	232	203	318	2260	4420	1100	451	289
9	533	430	329	254	258	209	396	2400	5180	1050	434	281
10	518	399	288	247	242	227	390	2320	4660	1040	426	273
11	510	423	323	247	230	445	426	2400	3910	1000	414	287
12	503	411	319	226	231	296	471	2060	3330	965	440	325
13	520	406	308	178	240	244	529	1800	3210	1180	427	332
14	551	421	278	178	230	237	602	1570	3210	1090	378	305
15	544	392	287	180	217	249	707	1480	3080	903	366	305
16	509	366	301	212	216	284	856	1470	3140	874	345	329
17	510	398	290	247	210	278	941	1480	3040	781	323	326
18	523	370	253	250	198	282	1060	1540	2920	759	305	317
19	498	355	308	269	196	28[illegible]	1220	1650	2580	873	304	316
20	503	318	275	276	203	29[illegible]	1090	1610	2470	1080	292	307
21	489	307	274	270	214	278	929	1570	2490	1230	286	309
22	491	336	220	261	204	263	816	1580	2430	1580	275	351
23	483	332	213	247	203	223	737	1660	2200	1320	279	376
24	477	345	272	203	186	220	724	1920	2050	1210	270	347
25	463	352	258	203	204	263	694	2250	2370	1080	268	337
26	459	348	287	216	200	279	730	2340	2190	895	256	331
27	493	288	301	243	186	255	665	2310	1720	878	251	330
28	468	318	301	254	206	247	782	2690	1460	805	257	407
29	470	322	289	239	---	240	951	2950	1460	752	269	475
30	469	320	261	230	---	213	1030	3020	1430	726	263	398
31	469	---	280	221	---	216	---	2760	---	681	257	---
TOTAL	15656	11465	8579	6947	5907	7606	18962	62360	84550	32642	11812	9765
MEAN	505	382	277	224	211	245	632	2012	2818	1053	381	326
MAX	600	468	329	276	258	445	1220	3020	5180	1580	642	475
MIN	459	288	213	135	170	175	220	1260	1430	681	251	256

CAL YR 1984 TOTAL 405187 MEAN 1107 MAX 6580 MIN 171

WTR YR 1985 TOTAL 276251 MEAN 757 MAX 5180 MIN 135

COLORADO RIVER MAIN STEM

09070500 COLORADO RIVER NEAR DOTSERO, CO

LOCATION.--Lat 39°38'38", long 107°04'38", in NW¼SE¼ sec.6, T.5 S., R.86 W., Eagle County, Hydrologic Unit 14010001, on left bank about 500 ft south of Interstate Highway 70, 1.5 mi west of Dotsero, and 1.5 mi downstream from Eagle River.

DRAINAGE AREA.--4,394 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,130 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-5, Dec. 2-9, 16-18, 23-27, Jan. 1 to Feb. 28, Mar. 1-3, 21-25. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, diversions for irrigation of 68,000 acres above station, and return flow from irrigated areas.

COOPERATION.--Gage-height record collected in cooperation with the Colorado State Engineer.

AVERAGE DISCHARGE.--45 years, 2,152 ft^3/s; 1,559,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,200 ft^3/s, May 25, 1984, gage height, 14.20 ft; minimum daily, 350 ft^3/s, Jan. 5, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,600 ft^3/s at 1200 June 9, gage height, 9.56 ft; minimum daily, 1100 ft^3/s, Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2100	1590	1560	1350	1100	1500	1200	4920	7650	4290	3040	1530
2	1900	1650	1450	1300	1200	1420	1120	5500	7330	4010	2910	1440
3	1900	1620	1410	1200	1320	1400	1140	6540	7480	3780	2820	1450
4	2000	1570	1400	1350	1310	1350	1640	7510	7320	3490	2630	1490
5	2110	1540	1430	1450	1300	1330	1790	8700	7360	3340	2570	1540
6	2110	1550	1500	1500	1320	1370	1650	8960	7760	3240	2450	1460
7	2090	1560	1600	1600	1400	1350	1730	8880	8270	3160	2290	1370
8	2050	1550	1700	1680	1550	1350	1990	9130	9590	3090	2250	1290
9	2000	1540	1750	1650	1500	1370	2360	9210	10800	3000	2200	1270
10	1960	1450	1750	1600	1380	1410	2560	9160	10900	2860	2170	1260
11	1960	1460	1630	1500	1400	1670	2620	9470	10400	2740	2160	1260
12	1890	1480	1590	1400	1440	1500	2880	8710	9110	2480	2230	1360
13	1960	1500	1510	1320	1480	1430	3050	7890	8540	3010	2230	1380
14	1990	1540	1490	1300	1440	1410	3100	7060	8360	3140	2120	1320
15	2080	1510	1430	1400	1400	1430	3370	6600	8130	2970	2040	1330
16	1940	1490	1410	1450	1450	1500	3820	6410	8040	2920	1950	1460
17	1780	1360	1410	1500	1420	1510	4250	6490	7820	2970	1850	1420
18	1790	1400	1400	1580	1400	1540	4580	6680	7640	3110	1770	1400
19	1760	1350	1460	1620	1450	1580	4990	6920	7140	3460	1780	1410
20	1700	1310	1450	1650	1480	1650	4640	6940	6760	4150	1740	1390
21	1690	1330	1470	1600	1460	1620	4100	6760	6730	4590	1720	1390
22	1710	1400	1410	1550	1450	1800	3740	6750	6490	4990	1710	1460
23	1740	1480	1400	1480	1440	1600	3450	6750	6090	4870	1690	1520
24	1760	1500	1400	1420	1460	1560	3380	7070	5760	4770	1660	1480
25	1690	1520	1500	1400	1450	1700	3330	7510	6100	4400	1630	1460
26	1630	1500	1600	1500	1420	1930	3350	7800	6030	4020	1590	1440
27	1730	1410	1600	1580	1480	1830	3220	7960	5370	3900	1580	1430
28	1630	1470	1550	1580	1500	1680	3420	8410	4920	3730	1590	1500
29	1680	1590	1460	1550	---	1530	3960	8830	4730	3640	1610	1700
30	1690	1530	1470	1400	---	1360	4240	8860	4620	3540	1600	1610
31	1630	---	1420	1200	---	1260	---	8310	---	3270	1610	---
TOTAL	57650	44750	46610	45660	39400	46940	90670	236690	223240	110930	63190	42820
MEAN	1860	1492	1504	1473	1407	1514	3022	7635	7441	3578	2038	1427
MAX	2110	1650	1750	1680	1550	1930	4990	9470	10900	4990	3040	1700
MIN	1630	1310	1400	1200	1100	1260	1120	4920	4620	2480	1580	1260
AC-FT	114300	88760	92450	90570	78150	93110	179800	469500	442800	220000	125300	84930

CAL YR 1984 TOTAL 1545230 MEAN 4222 MAX 20800 MIN 980 AC-FT 3065000
WTR YR 1985 TOTAL 1048550 MEAN 2873 MAX 10900 MIN 1100 AC-FT 2080000

09071100 COLORADO RIVER NEAR GLENWOOD SPRINGS,CO
(Irrigation Network Station)

LOCATION.--Lat 39°34'12", long 107°13'34", Garfield County, Hydrologic Unit 14010001, at Shoshone power plant, 6 mi upstream from Glenwood Springs, and 6.5 mi upstream from Roaring Fork River.

DRAINAGE AREA.--4,560 mi ,approximately.

PERIOD OF RECORD.--October 1941 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1941 to current year.
WATER TEMPERATURE: May 1949 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1980.

REMARKS.--Discharge obtained by subtracting the flow in Roaring Fork River at Glenwood Springs (station 09085000) from the flow in the Colorado River below Glenwood Springs (station 09085100). Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Additional chemical-quality data are provided by U.S. Bureau of Reclamation (noted by an asterick in the water year heading).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,460 microsiemens July 12, 1981, minimum recorded, 150 microsiemens May 31, 1982.
WATER TEMPERATURE: Maximum, 25.5°C July 8, 1981; minimum; 0.0°C many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,560 microsiemens July 21; minimum, 218 microsiemens June 9.
WATER TEMPERATURE: Maximum 20.5°C Aug. 22; minimum, 0.0°C many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT 05...	0800	1990	535	12.0	160	47	9.8	41	1
DEC 14...	0930	1600	530	.0	140	40	8.7	43	2
JAN 23...	1500	1950	512	.5	140	40	8.7	43	2
FEB 22...	1100	1500	572	.5	150	44	8.7	48	2
MAR 21...	1500	1760	550	6.0	160	47	11	41	1
APR 19...	1100	4990	315	7.0	140	43	7.7	17	.7
MAY 10...	--	9000	260	9.0	95	27	6.6	11	.5
JUN 05...	1530	7400	274	11.5	94	28	5.8	11	.5
JUL 18...	--	3250	444	17.5	140	41	8.8	28	1
AUG 22...	1300	1850	578	18.5	160	49	9.9	49	2
SEP 19...	1200	1600	695	12.0	200	61	12	58	2

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE, FET-LAB (MG/L AS HCO3)	CAR-BONATE, FET-LAB (MG/L AS CO3)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT 05...	2.3	120	.000	59	--	300	.41	1610
DEC 14...	1.6	95	.000	65	6.8	280	.38	1210
JAN 23...	1.6	100	.000	64	10	280	.38	1470
FEB 22...	2.3	110	.000	73	11	310	.42	1260
MAR 21...	2.3	120	.000	58	11	310	.42	1470
APR 19...	4.3	120	.000	18	12	200	.27	2700
MAY 10...	2.0	76	.000	11	11	130	.18	3160
JUN 05...	1.2	85	.000	13	8.8	140	.19	2800
JUL 18...	1.6	110	.000	37	9.6	240	.33	2110
AUG 22...	2.7	130	.000	70	9.6	330	.45	1650
SEP 19...	3.1	120	11	83	11	410	.56	1770

09071100 COLORADO RIVER NEAR GLENWOOD SPRINGS,CO

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	460	518	505	529	591	546	650	349	276	360	449	616
2	429	510	507	561	634	555	677	323	284	379	450	653
3	466	505	522	586	631	564	726	300	279	384	462	671
4	500	506	515	587	598	560	644	282	278	405	470	670
5	525	504	525	541	585	570	540	269	278	416	485	666
6	520	506	528	529	605	559	553	263	269	421	496	657
7	514	519	529	514	566	556	544	266	258	425	508	680
8	517	508	525	497	546	561	512	264	244	428	514	715
9	532	516	485	503	513	564	480	258	233	431	517	735
10	540	522	481	513	516	565	441	269	231	439	522	737
11	538	526	479	529	539	594	438	268	238	453	522	746
12	551	523	489	531	551	567	419	278	255	476	519	739
13	553	522	502	561	535	582	398	292	260	631	515	729
14	550	529	520	592	534	600	392	308	263	457	519	714
15	544	528	527	570	547	596	382	311	265	451	533	732
16	542	522	526	557	569	592	355	314	264	459	542	714
17	554	547	520	520	561	580	332	310	264	451	552	702
18	551	548	523	512	559	575	320	304	260	448	565	697
19	540	545	519	496	572	573	311	298	274	443	565	699
20	523	563	512	486	578	565	319	291	284	478	564	712
21	508	560	519	481	571	547	344	296	281	635	567	705
22	504	554	537	488	578	552	376	296	278	416	575	698
23	500	525	548	507	573	560	405	298	286	361	566	684
24	499	520	538	533	568	585	412	288	299	369	575	666
25	534	512	521	561	567	577	412	275	308	378	581	669
26	543	512	501	544	566	536	415	268	299	396	591	666
27	532	520	503	516	563	517	423	269	329	401	600	671
28	514	528	504	510	555	562	429	264	345	399	603	667
29	503	512	509	502	---	566	398	254	352	403	607	656
30	489	513	520	510	---	591	374	250	349	406	605	622
31	487	---	520	542	---	629	---	262	---	427	608	---
MEAN	518	524	515	529	567	569	447	285	279	433	540	690

WTR YR 1985 MEAN 491 MAX 746 MIN 231

09071100 COLORADO RIVER NEAR GLENWOOD SPRINGS,CO

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.5	10.0	7.0	5.5	1.0	.5	.0	.0	.0	.0	.0	.0
2	11.5	10.5	6.5	5.0	1.0	.0	.0	.0	.0	.0	.0	.0
3	11.5	11.5	6.5	5.5	.5	.0	.0	.0	.0	.0	1.5	.0
4	12.0	11.5	6.0	4.5	.5	.0	.0	.0	.0	.0	2.0	.5
5	12.5	12.0	5.0	3.5	.0	.0	.0	.0	.0	.0	2.5	1.0
6	12.0	11.0	4.5	4.0	.0	.0	.0	.0	.0	.0	3.5	2.0
7	11.5	10.0	5.0	4.0	.0	.0	.0	.0	.0	.0	4.5	3.0
8	11.0	9.5	5.0	4.0	.0	.0	.0	.0	.0	.0	5.0	3.0
9	10.5	9.5	4.5	3.5	.0	.0	.0	.0	.0	.0	5.5	4.0
10	11.0	9.5	4.0	2.5	.0	.0	.0	.0	.0	.0	5.5	4.0
11	10.5	9.0	4.5	3.5	.0	.0	.0	.0	.0	.0	5.0	4.0
12	10.5	9.5	5.0	3.5	.0	.0	.0	.0	.0	.0	5.0	4.5
13	10.0	8.5	5.0	4.0	.0	.0	.0	.0	.0	.0	6.5	4.0
14	10.0	8.5	5.0	4.5	.0	.0	.0	.0	.0	.0	6.5	5.0
15	8.0	6.0	4.5	3.5	.0	.0	.0	.0	.0	.0	7.0	5.0
16	6.0	5.0	3.5	2.5	.0	.0	.0	.0	.0	.0	7.0	5.5
17	6.0	4.5	3.0	2.0	.0	.0	.0	.0	.0	.0	7.0	5.5
18	5.0	3.5	2.5	1.5	.0	.0	.0	.0	.0	.0	7.5	6.0
19	5.0	4.0	2.5	1.5	.0	.0	.0	.0	.0	.0	8.0	6.5
20	5.5	4.0	2.5	1.0	.0	.0	.0	.0	.0	.0	8.0	6.5
21	6.0	5.0	1.5	.5	.0	.0	.0	.0	.0	.0	7.5	6.0
22	6.5	5.5	1.5	.5	.0	.0	.0	.0	.0	.0	7.0	4.5
23	7.0	5.5	1.5	.5	.0	.0	.0	.0	.0	.0	5.5	3.5
24	7.5	6.0	2.0	.5	.0	.0	.0	.0	.0	.0	6.5	3.5
25	7.0	5.0	2.5	1.5	.0	.0	.0	.0	.0	.0	7.5	5.0
26	6.0	4.5	2.5	1.5	.0	.0	.0	.0	.0	.0	7.5	5.5
27	6.0	5.0	2.0	.5	.0	.0	.0	.0	.0	.0	6.0	4.0
28	5.5	4.0	.5	.5	.0	.0	.0	.0	.0	.0	4.0	2.5
29	6.0	3.5	.5	.5	.0	.0	.0	.0	---	---	3.5	2.5
30	6.5	5.0	1.0	.5	.0	.0	.0	.0	---	---	5.0	2.5
31	6.5	6.0	---	---	.0	.0	.0	.0	---	---	4.5	4.0
MONTH	12.5	3.5	7.0	.5	1.0	.0	.0	.0	.0	.0	8.0	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.0	4.0	10.0	9.0	11.0	8.5	15.5	13.0	18.5	17.0	20.0	18.0
2	7.5	4.5	10.5	8.5	12.5	9.5	16.5	14.5	18.5	18.0	19.5	18.5
3	8.5	7.0	10.5	9.0	12.0	10.5	17.0	14.5	19.0	17.5	18.5	17.0
4	8.5	7.0	10.0	9.0	12.5	10.0	17.5	15.5	19.0	17.0	17.5	16.5
5	7.5	5.0	10.0	8.5	12.5	11.0	18.0	15.5	18.5	17.0	17.5	16.0
6	7.0	5.0	10.0	8.5	12.0	11.0	18.0	16.0	19.5	17.0	17.5	15.5
7	9.0	6.0	10.5	8.0	13.5	11.0	18.0	16.5	19.5	17.5	17.0	14.5
8	9.0	7.0	10.5	9.0	13.5	11.5	18.0	16.0	19.5	17.0	15.5	14.0
9	9.0	7.5	10.5	9.0	13.5	11.5	18.0	16.0	20.0	18.0	16.0	15.0
10	8.5	6.5	9.5	9.0	12.5	11.0	18.0	16.5	19.5	16.5	16.0	14.5
11	8.5	7.0	9.0	8.0	12.0	9.5	19.0	16.5	19.0	17.0	15.0	13.0
12	9.5	7.5	8.5	7.0	13.0	10.5	19.0	16.5	18.5	16.0	14.0	12.0
13	9.0	7.5	7.5	6.0	13.5	11.5	19.0	17.5	18.0	15.5	14.0	12.5
14	9.5	7.5	9.0	6.0	14.0	11.5	19.0	17.0	18.0	16.0	14.5	13.0
15	9.5	8.0	10.5	8.0	14.5	11.5	18.5	16.5	18.0	15.5	14.5	14.0
16	9.5	8.0	11.0	9.5	14.0	12.5	18.0	16.5	18.5	16.0	14.5	13.0
17	9.0	8.0	11.5	9.5	14.5	12.0	18.0	16.5	18.5	16.0	14.5	13.0
18	9.0	7.5	11.0	9.5	14.5	12.5	19.0	17.0	18.5	17.0	13.5	12.5
19	8.5	6.0	10.0	9.0	15.0	12.5	19.0	18.0	18.5	16.5	13.5	12.0
20	6.0	5.0	10.5	8.5	15.5	13.0	18.0	16.0	19.0	17.0	14.0	12.0
21	6.5	4.0	10.5	9.0	15.5	13.5	17.0	15.5	20.0	17.5	13.5	12.0
22	7.0	6.0	11.0	8.5	15.5	13.0	16.5	15.0	20.5	18.5	13.5	12.0
23	7.5	5.5	11.5	9.0	16.0	13.5	17.0	15.0	20.0	18.0	12.0	10.0
24	8.0	7.0	12.0	10.5	16.0	13.5	17.0	15.5	19.5	17.0	11.0	10.0
25	8.0	7.0	12.0	10.5	15.5	13.5	17.0	14.5	19.0	17.0	10.5	9.0
26	7.0	6.5	11.5	10.0	14.0	12.0	17.5	15.5	19.5	17.5	10.5	9.0
27	9.0	6.0	12.0	9.5	13.5	10.5	18.0	16.0	19.0	17.0	11.5	9.5
28	10.0	8.0	11.5	10.0	15.5	12.0	17.5	16.0	20.0	18.0	11.5	10.0
29	10.0	9.5	11.5	10.5	16.0	13.5	17.0	16.0	20.0	18.0	10.0	9.0
30	10.5	8.0	11.0	10.0	15.5	13.5	17.0	15.5	19.0	17.0	9.5	7.5
31	---	---	10.5	8.5	---	---	18.5	15.5	19.5	17.5	---	---
MONTH	10.5	4.0	12.0	6.0	16.0	8.5	19.0	13.0	20.5	15.5	20.0	7.5
YEAR	20.5	.0										

09071300 GRIZZLY CREEK NEAR GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°43'00", long 107°18'35", in NE¼SW¼ sec.7, T.4 S., R.88 W., Garfield County, Hydrologic Unit 14010001, on left bank 0.5 mi west of Grizzly Cow Camp and 14 mi north of Glenwood Springs.

DRAINAGE AREA.--5.73 mi².

PERIOD OF RECORD.--September 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,435 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 19, 1978, at site 600 ft upstream, at datum, 25.33 ft, higher.

REMARKS.--Estimated daily discharges: Oct. 17-19, 27, 28, Nov. 2, 4, 8-11, Nov. 30 to May 2. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years, 14.6 ft³/s; 10,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 320 ft³/s, June 10, 1985; maximum gage height observed, 8.63 ft, May 4, 1982 (backwater from ice); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 85 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 31	1600	184	4.69	June 15	2200	236	4.87
June 10	2000	*320	*5.20				

Minimum daily discharge, 1.5 ft³/s, Jan. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	5.7	2.9	2.2	1.8	1.6	2.1	8.2	134	38	8.4	2.4
2	6.4	5.8	2.9	1.9	1.9	1.7	2.3	8.9	103	34	8.4	2.6
3	6.5	5.6	2.9	1.9	2.0	1.7	2.3	12	110	32	7.5	2.9
4	7.2	5.8	2.8	2.1	2.1	1.7	2.2	16	135	30	6.8	2.8
5	8.6	5.5	2.7	2.2	2.2	1.7	2.2	19	157	27	6.2	2.6
6	9.1	5.0	2.8	2.4	2.2	1.6	2.2	19	176	24	5.5	2.4
7	9.0	4.7	2.9	2.4	2.2	1.7	2.4	21	189	23	5.2	2.4
8	8.8	4.6	2.9	2.4	2.1	1.7	2.6	24	196	21	4.9	2.3
9	8.4	4.5	2.9	2.4	2.0	1.7	3.0	28	242	18	4.7	2.2
10	8.4	4.5	2.9	2.4	2.0	1.8	3.4	31	284	17	4.7	2.1
11	8.2	4.3	3.0	2.4	2.1	1.9	3.8	31	229	15	4.5	2.2
12	8.4	4.5	2.7	2.3	2.2	1.8	4.3	29	191	20	5.1	2.5
13	8.7	4.2	2.7	2.3	2.0	1.8	5.0	28	181	17	4.5	2.4
14	8.7	5.1	2.8	2.4	2.0	1.8	6.0	26	186	14	4.4	2.2
15	8.3	4.2	2.9	2.3	2.0	1.9	6.8	23	207	13	4.1	2.2
16	7.8	3.9	2.9	2.3	1.9	1.9	7.6	21	215	12	3.9	2.2
17	7.4	3.7	2.7	2.2	1.8	1.9	8.8	20	211	12	3.6	2.0
18	7.0	3.5	2.7	2.2	1.8	1.9	10	20	207	14	3.3	2.2
19	7.2	3.4	2.8	2.2	1.8	1.9	12	24	196	13	3.3	2.7
20	7.4	3.3	2.9	2.3	1.9	2.0	12	21	187	13	3.5	2.2
21	7.4	3.2	2.7	2.4	1.8	1.9	11	22	183	14	3.3	2.1
22	7.4	3.1	2.6	2.3	1.7	2.0	10	25	176	13	3.2	2.0
23	7.3	3.0	2.5	2.2	1.7	2.0	9.6	32	160	13	3.2	2.1
24	7.0	3.0	2.4	2.1	1.6	2.0	9.0	50	143	14	3.1	2.0
25	7.0	3.0	2.6	2.2	1.6	2.0	8.4	67	139	13	3.0	1.9
26	6.4	2.9	2.7	2.2	1.6	2.1	7.6	78	129	12	2.9	1.8
27	6.2	2.7	2.8	2.2	1.6	2.1	7.0	93	97	11	2.8	1.9
28	6.0	2.9	2.9	2.2	1.6	2.1	6.8	113	57	9.8	2.7	2.1
29	6.2	2.9	2.7	2.2	---	2.1	7.2	134	46	9.7	2.8	2.1
30	5.8	2.9	2.7	1.9	---	2.0	7.8	152	42	9.9	2.5	2.0
31	5.7	---	2.7	1.5	---	2.0	---	163	---	9.6	2.5	---
TOTAL	229.9	121.4	86.0	68.6	53.2	58.0	185.4	1359.1	4908	536.0	134.5	67.5
MEAN	7.42	4.05	2.77	2.21	1.90	1.87	6.18	43.8	164	17.3	4.34	2.25
MAX	9.1	5.8	3.0	2.4	2.2	2.1	12	163	284	38	8.4	2.9
MIN	5.7	2.7	2.4	1.5	1.6	1.6	2.1	8.2	42	9.6	2.5	1.8
AC-FT	456	241	171	136	106	115	368	2700	9740	1060	267	134

CAL YR 1984	TOTAL	5703.38	MEAN	15.6	MAX	135	MIN	.31	AC-FT	11310
WTR YR 1985	TOTAL	7807.6	MEAN	21.4	MAX	284	MIN	1.5	AC-FT	15490

09072550 ROARING FORK RIVER ABOVE LOST MAN CREEK, NEAR ASPEN, CO

LOCATION.--Lat 39°07'13", long 106°37'27", Pitkin County, Hydrologic Unit 14010004, on right bank 300 ft, upstream from Lost Man campground, 600 ft, downstream from diversion dam, 1,000 ft, upstream from Lost Man Creek, and 12 mi southeast of Aspen.

DRAINAGE AREA.--9.10 mi^2.

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,520 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 25 to May 14. Records good except for estimated daily discharges, which are poor. Diversions from Lost Man Creek via canal into diversion dam, 600 ft, upstream, which also diverts some of the Roaring Fork River, via tunnel, to Grizzly Reservoir on Lincoln Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 740 ft^3/s, June 8, 1985, gage height, 4.40 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 740 ft^3/s at 2000 June 8, gage height, 4.40 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.40	.00	.00	.00	.00	.00	1.1	120	104	5.3	1.5
2	1.1	.31	.00	.00	.00	.00	.00	2.2	134	114	5.3	1.4
3	1.0	.26	.00	.00	.00	.00	.00	5.4	140	120	5.3	1.4
4	1.1	.21	.00	.00	.00	.00	.00	7.8	150	123	5.3	1.4
5	1.1	.14	.00	.00	.00	.00	.00	7.2	170	120	5.1	1.4
6	1.1	.06	.00	.00	.00	.00	.00	7.2	224	112	5.1	1.4
7	1.8	.02	.00	.00	.00	.00	.00	7.4	266	107	5.1	1.4
8	2.4	.02	.00	.00	.00	.00	.00	7.2	333	97	5.0	1.3
9	2.4	.00	.00	.00	.00	.00	.00	7.2	425	115	5.0	1.3
10	2.4	.00	.00	.00	.00	.00	.00	7.4	442	166	5.0	1.3
11	2.4	.00	.00	.00	.00	.00	.00	7.4	303	135	5.0	1.3
12	2.4	.00	.00	.00	.00	.00	.00	7.2	309	131	4.8	1.3
13	2.4	.00	.00	.00	.00	.00	.00	7.0	365	148	4.6	1.3
14	2.4	.00	.00	.00	.00	.00	.00	4.8	377	110	4.6	1.3
15	2.4	.00	.00	.00	.00	.00	.00	3.0	372	90	4.6	1.3
16	3.3	.00	.00	.00	.00	.00	.00	3.3	318	80	4.6	1.3
17	2.9	.00	.00	.00	.00	.00	.00	3.3	354	75	4.6	1.2
18	4.0	.00	.00	.00	.00	.00	.00	3.4	310	69	4.5	1.2
19	4.8	.00	.00	.00	.00	.00	.00	3.5	276	78	4.5	1.3
20	2.8	.00	.00	.00	.00	.00	.00	3.5	274	90	4.5	1.3
21	2.6	.00	.00	.00	.00	.00	.00	3.5	279	7.0	4.5	1.2
22	2.5	.00	.00	.00	.00	.00	.00	3.7	255	6.8	4.5	1.2
23	2.5	.00	.00	.00	.00	.00	.00	3.7	223	6.4	4.5	1.2
24	2.5	.00	.00	.00	.00	.00	.00	3.7	212	6.6	4.5	1.2
25	2.4	.00	.00	.00	.00	.00	.00	3.8	246	6.1	4.5	1.1
26	2.3	.00	.00	.00	.00	.00	.00	3.8	171	5.9	4.5	1.1
27	2.2	.00	.00	.00	.00	.00	.00	3.8	121	5.9	4.5	1.0
28	2.1	.00	.00	.00	.00	.00	.10	64	112	5.7	4.5	1.0
29	2.0	.00	.00	.00	---	.00	.25	165	118	5.7	4.5	.98
30	1.4	.00	.00	.00	---	.00	.30	151	106	5.5	3.0	.98
31	.64	---	.00	.00	---	.00	---	135	---	5.5	1.5	---
TOTAL	68.44	1.42	.00	.00	.00	.00	.65	647.5	7505	2251.1	142.8	37.56
MEAN	2.21	.05	.00	.00	.00	.00	.02	20.9	250	72.6	4.61	1.25
MAX	4.8	.40	.00	.00	.00	.00	.30	165	442	166	5.3	1.5
MIN	.64	.00	.00	.00	.00	.00	.00	1.1	106	5.5	1.5	.98
AC-FT	136	2.8	.00	.00	.00	.00	1.3	1280	14890	4470	283	75

CAL YR 1984	TOTAL	11759.89	MEAN	32.1	MAX	185	MIN	.00	AC-FT	23330
WTR YR 1985	TOTAL	10654.47	MEAN	29.2	MAX	442	MIN	.00	AC-FT	21130

09073005 LINCOLN CREEK BELOW GRIZZLY RESERVOIR NEAR ASPEN, CO

LOCATION.--Lat 39°04'48", long 106°36'37", Pitkin County, Hydrologic Unit 14010004, on right bank 170 ft below centerline of Grizzly Reservoir Dam and 13.6 mi southeast of Aspen.

DRAINAGE AREA.--15.2 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,510 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 3-14, May 27 to June 4. Records good except for estimated daily discharges, which are fair. Flow completely regulated by Grizzly Reservoir; capacity, 400 ac/ft (approximate). Inter-basin diversion into Grizzly Reservoir from Roaring Fork River. Diversions through New York Canal from main stem tributaries below gage into Grizzly Reservoir. Trans-mountain diversion from Grizzly Reservoir into North Fork Lake Creek. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 319 ft³/s, July 1, 1984; gage height, 3.16 ft, maximum gage height, 3.28 ft, Sept. 26, 1983; minimum daily discharge, 0.20 ft³/s, Oct. 18, 20-21, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 312 ft³/s at 0200 June 8, gage height, 3.18 ft; minimum daily, 1.8 ft³/s, Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.0	7.8	8.4	2.7	2.4	2.0	4.7	64	71	12	4.9
2	4.0	5.6	8.1	8.1	2.7	2.4	1.8	4.9	100	73	11	4.6
3	4.0	17	8.1	8.1	2.5	2.4	2.2	5.3	140	80	11	5.1
4	4.0	23	8.1	7.8	2.5	2.4	2.2	5.3	180	85	10	5.1
5	3.7	23	7.8	7.8	2.5	2.4	2.2	5.2	203	92	10	4.7
6	2.7	22	7.8	7.8	2.5	2.4	2.2	5.0	241	105	10	3.8
7	2.7	22	7.8	7.8	2.5	2.4	2.2	5.0	298	103	10	3.8
8	2.7	22	7.8	7.8	2.5	2.4	2.4	5.0	290	101	10	3.8
9	2.7	22	7.8	7.8	2.5	2.4	2.4	5.0	277	82	10	3.8
10	2.9	22	7.8	7.8	2.5	2.4	2.4	5.0	294	7.3	10	4.0
11	2.9	22	7.8	7.6	2.5	2.4	2.2	4.9	242	7.0	10	4.0
12	2.9	19	7.8	7.8	2.5	2.4	2.2	4.7	202	7.0	10	4.0
13	2.9	13	8.1	7.8	2.4	2.4	2.4	4.5	214	6.7	10	4.0
14	2.7	13	8.1	7.8	2.4	2.4	2.4	4.2	239	14	10	4.0
15	2.7	13	8.1	7.8	2.4	2.2	2.4	3.9	249	25	10	4.0
16	2.7	13	8.1	7.8	2.5	2.4	2.4	4.0	249	36	10	4.0
17	2.9	13	8.1	7.6	2.5	2.4	2.5	4.0	250	36	10	4.1
18	2.9	13	8.1	7.6	2.5	2.4	2.5	4.7	253	35	10	4.2
19	2.9	13	8.4	7.6	2.5	2.4	3.8	5.4	233	18	10	4.2
20	3.1	10	8.4	7.6	2.5	2.4	4.7	5.1	186	4.2	10	4.2
21	2.9	7.6	8.4	7.6	2.5	2.4	4.7	4.7	117	60	10	4.2
22	2.7	7.6	8.1	5.7	2.4	2.4	4.7	4.7	123	117	10	4.2
23	2.7	7.8	8.1	2.7	2.2	2.4	4.7	4.9	133	119	10	4.2
24	2.9	7.8	8.1	2.7	2.4	2.4	4.7	5.4	184	107	10	4.0
25	2.9	7.8	8.1	2.7	2.4	2.4	4.7	5.1	175	43	10	4.0
26	2.9	7.8	8.4	2.7	2.4	2.4	4.7	5.1	173	20	10	4.0
27	2.9	7.8	8.4	2.7	2.4	2.4	4.7	5.8	103	17	10	4.0
28	2.9	7.8	8.4	2.7	2.4	2.4	4.7	9.2	69	12	10	4.0
29	2.7	7.8	8.4	2.7	---	2.4	4.7	22	70	11	10	4.0
30	2.7	7.8	8.1	2.7	---	2.4	4.7	30	71	11	8.2	4.0
31	2.9	---	8.4	2.7	---	2.4	---	40	---	12	4.9	---
TOTAL	92.9	401.2	250.8	193.8	69.2	74.2	96.5	232.7	5622	1517.2	307.1	124.9
MEAN	3.00	13.4	8.09	6.25	2.47	2.39	3.22	7.51	187	48.9	9.91	4.16
MAX	4.0	23	8.4	8.4	2.7	2.4	4.7	40	298	119	12	5.1
MIN	2.7	3.0	7.8	2.7	2.2	2.2	1.8	3.9	64	4.2	4.9	3.8
AC-FT	184	796	497	384	137	147	191	462	11150	3010	609	248

CAL YR 1984	TOTAL	14935.2	MEAN	40.8	MAX	316	MIN	1.6	AC-FT	29620
WTR YR 1985	TOTAL	8982.5	MEAN	24.6	MAX	298	MIN	1.8	AC-FT	17820

09073300 ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°08'28", long 106°46'25", Pitkin County, Hydrologic Unit 14010004, on left bank in the White River National Forest at Difficult Creek Campground, 0.45 mi above Difficult Creek tributary and 4.25 mi southeast of Aspen.

DRAINAGE AREA.--75.8 mi^2.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 3-6, 22-26, Jan. 2-24, 27, Feb. 3 to Apr. 24. Records good except for estimated daily discharges, which are poor. Transmountain diversion 11 mi upstream through Twin Lakes Tunnel to Arkansas River basin since May 24, 1935 (14,900 acre-ft diverted, current year, furnished by Colorado Division of Water Resources). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--6 years, 143 ft^3/s; 103,600 acre-ft/yr, including diversion by Twin Lakes tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,350 ft^3/s, June 8, 1985, gage height, 5.10 ft, from rating curve extended above 910 ft^3/s; minimum daily, 8.0 ft^3/s, Jan. 11, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,350 ft^3/s at 2200 June 8, gage height, 5.10 ft; minimum daily, 18 ft^3/s, Feb. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	37	33	28	20	21	23	95	428	307	73	23
2	37	38	33	28	19	20	24	139	449	319	79	25
3	37	44	33	26	18	20	24	165	515	337	72	26
4	41	54	32	26	20	19	26	193	563	360	66	25
5	52	54	32	27	20	20	25	182	789	362	63	23
6	47	56	32	27	21	20	25	176	1010	365	59	21
7	45	53	33	27	21	20	27	176	1510	356	57	20
8	45	53	33	27	21	20	29	191	1930	342	54	20
9	46	52	33	26	21	20	32	188	1900	356	46	20
10	46	52	32	26	21	20	35	190	1480	281	43	20
11	46	57	32	26	20	20	39	167	889	236	42	21
12	49	54	32	24	21	20	45	131	763	239	42	27
13	46	45	32	24	21	20	50	113	851	292	40	22
14	45	44	35	25	22	19	60	98	972	219	38	21
15	43	41	32	24	21	20	72	108	1230	200	38	23
16	41	44	30	24	21	21	82	108	1150	194	36	24
17	43	45	30	23	21	21	90	113	1170	188	35	21
18	42	43	31	23	21	23	100	137	1080	179	35	21
19	43	40	31	23	21	23	96	172	934	171	36	22
20	43	40	30	23	22	23	80	167	847	197	33	22
21	42	36	29	23	21	23	74	164	741	196	32	22
22	42	37	29	23	21	23	70	167	686	260	32	23
23	41	37	28	22	20	21	61	191	613	247	30	24
24	41	36	28	22	20	21	59	217	626	228	30	26
25	41	36	29	24	20	22	56	246	681	161	30	28
26	41	36	30	24	20	22	54	263	593	112	30	27
27	42	35	30	23	21	21	51	275	414	100	29	28
28	41	34	30	24	20	22	62	362	336	92	30	30
29	41	34	30	22	---	21	70	907	342	88	31	32
30	37	33	28	21	---	20	73	712	319	86	30	28
31	37	---	28	20	---	22	---	561	---	79	24	---
TOTAL	1322	1300	960	755	576	648	1614	7074	25811	7149	1315	715
MEAN	42.6	43.3	31.0	24.4	20.6	20.9	53.8	228	860	231	42.4	23.8
MAX	52	57	35	28	22	23	100	907	1930	365	79	32
MIN	37	33	28	20	18	19	23	95	319	79	24	20
AC-FT	2620	2580	1900	1500	1140	1290	3200	14030	51200	14180	2610	1420

CAL YR 1984 TOTAL 72328 MEAN 198 MAX 1430 MIN 13 AC-FT 143500
WTR YR 1985 TOTAL 49239 MEAN 135 MAX 1930 MIN 18 AC-FT 97670

09073400 ROARING FORK RIVER NEAR ASPEN, CO

LOCATION.--Lat 39°10'48", long 106°48'05", Pitkin County, Hydrologic Unit 14010004, on right bank 25 ft upstream from private bridge, 115 ft upstream from Salvation ditch headgate, 1.0 mi southeast of Aspen, and 2.0 mi upstream from Hunter Creek.

DRAINAGE AREA.--108 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,014.01 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 25, 1968, at site 85 ft upstream at datum 1.16 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 22, Jan. 31 to Feb. 3. Records good except for estimated daily discharges, which are fair. Transmountain diversion 14 mi upstream through Twin Lakes tunnel to Arkansas River basin since May 24, 1935 (14,910 acre-ft diverted, current year, provided by Colorado Division of Water Resources). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 149 ft³/s; 108,000 acre-ft/yr, including diversion by Twin Lakes tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,230 ft³/s, June 9, 1985, gage height, 5.29 ft; minimum daily, 12 ft³/s, Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,230 ft³/s at 0100 June 9, gage height, 5.29 ft; minimum daily, 28 ft³/s, Feb. 2, Mar. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	57	53	41	29	31	33	133	607	345	136	47
2	62	55	50	42	28	30	33	160	636	361	142	50
3	61	62	53	38	32	30	35	219	704	375	135	54
4	72	69	49	40	35	29	37	262	729	398	124	52
5	92	66	49	41	35	30	34	269	972	405	114	51
6	82	68	48	41	34	30	35	253	1120	407	110	48
7	78	67	49	43	34	29	38	256	1410	384	107	47
8	77	74	48	41	34	29	41	283	1700	367	99	48
9	74	72	48	41	34	30	46	277	1790	375	90	46
10	73	70	47	38	33	30	47	293	1520	349	84	45
11	71	77	50	40	32	30	54	265	1010	307	85	54
12	72	74	50	38	33	30	59	223	863	295	87	64
13	66	66	48	38	33	30	68	196	907	361	81	49
14	63	67	48	38	34	29	78	176	956	305	76	47
15	59	58	47	37	34	31	98	176	1020	279	73	51
16	58	63	46	37	34	31	122	190	1000	270	69	54
17	64	65	45	36	33	31	137	201	954	271	68	47
18	64	62	47	36	33	33	151	227	952	264	67	44
19	65	62	45	36	32	33	149	235	874	252	71	52
20	65	54	46	35	33	32	125	223	796	280	65	50
21	64	53	44	36	31	33	112	226	686	272	63	50
22	63	58	44	36	32	32	108	239	639	335	66	54
23	63	56	44	34	32	30	95	269	558	313	66	56
24	59	55	42	37	31	32	90	295	580	301	67	58
25	57	54	43	34	32	34	87	342	684	254	68	57
26	55	50	45	33	30	35	83	381	569	198	67	55
27	61	51	44	33	31	31	80	419	439	184	66	58
28	59	55	44	33	30	32	100	504	380	164	62	71
29	59	55	43	33	---	32	109	1080	385	161	57	70
30	55	52	41	30	---	28	108	989	361	159	57	58
31	53	---	43	30	---	34	---	781	---	145	50	---
TOTAL	2032	1847	1443	1146	908	961	2392	10042	25801	9136	2572	1587
MEAN	65.5	61.6	46.5	37.0	32.4	31.0	79.7	324	860	295	83.0	52.9
MAX	92	77	53	43	35	35	151	1080	1790	407	142	71
MIN	53	50	41	30	28	28	33	133	361	145	50	44
AC-FT	4030	3660	2860	2270	1800	1910	4740	19920	51180	18120	5100	3150

CAL YR 1984 TOTAL 85196 MEAN 233 MAX 1550 MIN 26 AC-FT 169000
WTR YR 1985 TOTAL 59867 MEAN 164 MAX 1790 MIN 28 AC-FT 118700

09074000 HUNTER CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°12'21", long 106°47'49", Pitkin County, Hydrologic Unit 14010004, on right bank 280 ft upstream from headgate of Red Mountain ditch, 1.5 mi upstream from mouth, and 1.5 mi northeast of Aspen.

DRAINAGE AREA.--41.1 mi^2.

PERIOD OF RECORD.--June 1950 to September 1956, September 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,610 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 1, 1969, at site 220 ft downstream, at different datum.

REMARKS.--Estimated daily discharges: Oct. 7 to Nov. 7, Nov. 10 to Jan. 29, Jan. 31 to Feb. 14, June 23-25. Records fair except for periods of estimated daily discharges, which are poor. Transmountain diversion above station to Charles H. Boustead tunnel by feeder conduit. Several small diversions above station for irrigation of hay meadows above and below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years (water years 1951-1956, 1970-1979), 50.7 ft^3/s; 36,730 acre-ft/yr, prior to diversion through Charles H. Boustead Tunnel; 6 years (water years 1980-85), 45.8 ft^3/s; 33,180 acre-ft/yr, subsequent to diversions through Charles H. Boustead Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft^3/s, June 8, 1985, gage height, 2.33 ft; from rating curve extended above 300 ft^3/s; maximum gage height, 4.30 ft, Nov. 30, 1984 (backwater from ice); minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,170 ft^3/s at 2200 June 8, gage height, 2.33 ft; maximum gage height 4.30 ft Nov. 30 (backwater from ice); minimum daily, 7.8 ft^3/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	27	18	12	8.2	9.4	8.3	70	139	58	37	12
2	30	27	18	13	7.8	9.0	8.3	88	139	85	42	15
3	29	28	17	13	8.4	9.0	9.9	118	142	51	37	17
4	34	29	16	12	8.8	9.0	11	132	139	48	36	19
5	54	28	16	13	9.4	9.9	9.9	139	136	47	33	15
6	53	28	16	13	9.2	9.4	9.0	143	181	47	31	13
7	48	29	16	13	9.2	9.4	11	146	385	47	30	12
8	46	25	15	12	9.2	9.4	15	160	627	47	28	14
9	43	30	15	12	9.2	9.4	17	160	780	47	30	13
10	41	29	16	12	9.0	9.4	15	160	669	53	26	11
11	40	30	16	12	9.2	9.4	18	153	390	47	25	13
12	38	29	16	11	9.4	9.4	19	126	208	48	31	27
13	34	27	15	12	9.4	9.9	26	111	301	65	26	16
14	31	27	15	12	9.0	8.9	33	97	402	51	23	14
15	28	26	14	11	9.0	8.7	41	95	523	45	21	19
16	28	25	14	11	9.0	9.0	48	117	494	45	19	25
17	29	26	13	11	9.0	9.0	55	103	479	44	18	17
18	30	26	13	10	9.0	9.4	69	125	429	44	18	14
19	30	26	13	10	10	9.4	76	123	360	50	18	16
20	30	24	13	10	10	8.7	61	111	329	74	18	15
21	29	23	13	10	10	8.7	49	114	334	125	16	15
22	27	23	13	11	9.4	8.7	40	125	258	91	16	19
23	26	23	13	10	9.4	8.3	35	132	200	57	15	20
24	25	22	12	11	10	8.7	31	142	230	51	15	20
25	26	21	13	10	9.0	9.0	31	153	130	51	14	18
26	27	20	13	9.6	9.4	9.4	29	150	63	53	13	17
27	28	20	13	9.6	10	8.0	30	157	58	47	13	20
28	26	20	13	9.8	9.4	10	41	160	58	45	13	28
29	25	18	12	9.8	---	9.4	49	156	53	41	12	24
30	25	18	12	9.5	---	8.8	55	146	50	41	12	19
31	24	---	13	9.2	---	8.3	---	139	---	39	12	---
TOTAL	1015	754	445	344.5	258.0	282.4	950.4	4051	8686	1684	698	517
MEAN	32.7	25.1	14.4	11.1	9.21	9.11	31.7	131	290	54.3	22.5	17.2
MAX	54	30	18	13	10	10	76	160	780	125	42	28
MIN	24	18	12	9.2	7.8	8.0	8.3	70	50	39	12	11
AC-FT	2010	1500	883	683	512	560	1890	8040	17230	3340	1380	1030

CAL YR 1984 TOTAL 26188.7 MEAN 71.6 MAX 519 MIN 4.2 AC-FT 51950
WTR YR 1985 TOTAL 19685.3 MEAN 53.9 MAX 780 MIN 7.8 AC-FT 39050

09074800 CASTLE CREEK ABOVE ASPEN, CO

LOCATION.--Lat 39°05'15", long 106°48'42", Pitkin County, Hydrologic Unit 14010004, on right bank 0.4 mi downstream from Forest Service bridge, 0.4 mi upstream from Sandy Creek, and 7 mi south of Aspen.

DRAINAGE AREA.--32.2 mi^2.

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,100 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 30 to Jan. 2, Jan. 6 to Feb. 2, March 2-12. Records good except for estimated daily discharges, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years, 43.7 ft^3/s; 31,660 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 559 ft^3/s, June 30, 1984, gage height, 3.64 ft; maximum gage height, 3.88 ft, June 23, 1970; minimum daily discharge, 6.0 ft^3/s, Jan. 7, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 28	2200	200	2.35	July 4	2300	260	2.62
June 8	2300	*556	*3.62				

Minimum daily discharge, 107 ft^3/s, Apr. 7-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	25	21	19	16	13	11	38	119	174	80	39
2	31	24	21	18	15	13	11	54	122	195	83	44
3	31	23	22	19	17	12	11	72	148	204	81	47
4	36	23	21	19	17	12	11	92	164	210	76	48
5	37	22	20	19	17	12	11	92	199	208	73	45
6	34	22	22	20	17	12	11	91	247	200	68	42
7	33	23	24	19	17	12	10	87	350	184	67	40
8	34	24	23	19	17	12	10	96	436	168	67	39
9	33	26	20	18	15	13	10	94	456	168	70	35
10	32	24	20	18	15	12	10	95	409	166	66	33
11	32	23	21	18	15	12	11	85	283	151	63	44
12	31	23	21	18	15	12	11	74	290	158	64	53
13	31	24	21	18	15	12	13	71	325	175	56	41
14	31	26	21	17	15	12	15	67	345	145	53	38
15	30	23	20	17	15	12	19	64	349	132	50	48
16	27	24	21	17	15	12	23	66	356	128	48	49
17	26	24	21	17	15	12	26	72	358	128	47	46
18	25	24	19	17	15	12	32	75	357	124	48	43
19	26	24	20	17	15	12	32	77	328	112	47	49
20	27	22	20	17	14	12	33	73	316	113	46	43
21	29	22	20	18	14	12	34	73	341	112	45	42
22	29	23	19	17	14	12	32	73	327	107	45	43
23	29	23	19	17	13	12	30	82	304	103	45	40
24	28	23	19	18	13	12	29	95	298	95	43	38
25	27	22	21	17	13	12	29	114	326	88	42	37
26	26	22	19	17	13	12	27	124	236	87	41	34
27	26	21	19	17	13	11	26	152	162	85	40	33
28	26	24	19	17	13	11	28	170	163	88	40	38
29	25	22	19	17	---	11	29	177	191	83	40	34
30	25	21	19	17	---	11	32	166	179	81	39	31
31	25	---	19	16	---	11	---	142	---	79	39	---
TOTAL	912	696	631	549	418	370	617	2903	8484	4251	1712	1236
MEAN	29.4	23.2	20.4	17.7	14.9	11.9	20.6	93.6	283	137	55.2	41.2
MAX	37	26	24	20	17	13	34	177	456	210	83	53
MIN	25	21	19	16	13	11	10	38	119	79	39	31
AC-FT	1810	1380	1250	1090	829	734	1220	5760	16830	8430	3400	2450

CAL YR 1984	TOTAL	29032.9	MEAN	79.3	MAX	452	MIN	7.9	AC-FT 57590
WTR YR 1985	TOTAL	22779	MEAN	62.4	MAX	456	MIN	10	AC-FT 45180

09075700 MAROON CREEK ABOVE ASPEN, CO

LOCATION.--Lat 39°07'25", long 106°54'17", Pitkin County, Hydrologic Unit 14010004, on left bank 0.3 mi upstream from Silver Queen Forest Service campground, 1.2 mi downstream from confluence of East and West Maroon Creeks, and 7.2 mi southwest of Aspen.

DRAINAGE AREA.--35.4 mi^2.

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,720 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 28 to June 3, July 19-25. Records good except for periods of estimated daily discharges, which are poor. No diversion above station. Natural regulation by Maroon Lake. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years, 68.3 ft^3/s; 49,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 836 ft^3/s, June 22, 1980, gage height, 3.39 ft, from rating curve extended above 350 ft^3/s; maximum gage height, 4.53 ft, Feb. 3, 1972 (backwater from ice); minimum daily discharge, 9.0 ft^3/s, Mar. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 250 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 3	1300	-	*a3.06	June 20	0300	*604	2.87

a- Backwater from ice.
Minimum daily discharge, 21 ft^3/s, Apr. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	52	37	35	28	25	23	64	210	365	164	72
2	79	52	38	33	26	26	23	76	220	346	163	74
3	79	51	37	33	28	25	22	94	230	349	158	74
4	80	49	36	33	28	24	22	140	227	341	152	74
5	80	49	37	34	28	24	22	140	226	330	150	72
6	77	48	38	34	28	24	22	130	226	316	147	70
7	76	48	39	34	28	24	21	140	225	308	143	69
8	74	47	37	33	28	25	22	150	291	302	140	68
9	73	48	37	32	27	25	22	150	413	303	140	66
10	72	46	36	32	27	24	22	140	461	300	137	65
11	71	45	37	32	27	24	23	140	380	306	135	66
12	71	45	38	32	27	24	24	130	377	292	132	72
13	69	45	38	31	28	25	26	120	391	281	120	66
14	69	45	37	30	28	25	31	110	396	284	115	64
15	69	45	36	30	28	25	37	110	324	297	110	66
16	68	44	36	30	28	25	44	120	412	291	106	67
17	66	44	37	30	27	24	46	120	435	278	101	64
18	64	44	36	30	27	24	48	130	470	266	98	61
19	64	43	36	30	27	24	52	130	473	260	95	63
20	64	43	36	31	27	24	52	120	488	250	92	62
21	63	42	35	31	28	24	50	130	458	240	90	62
22	61	42	34	30	27	24	50	130	467	230	88	63
23	60	41	34	31	26	25	48	140	475	220	86	61
24	60	41	35	31	25	25	46	160	459	210	83	60
25	59	41	35	30	25	24	45	190	439	210	80	60
26	56	40	34	30	25	23	44	220	432	205	79	59
27	56	40	33	30	25	22	46	240	394	196	77	58
28	56	39	34	30	25	22	48	280	369	188	75	64
29	55	39	34	29	---	22	52	290	388	180	75	63
30	54	37	35	29	---	22	56	270	376	176	74	60
31	52	---	34	29	---	23	---	230	---	169	73	---
TOTAL	2076	1335	1116	969	756	746	1089	4734	11132	8289	3478	1965
MEAN	67.0	44.5	36.0	31.3	27.0	24.1	36.3	153	371	267	112	65.5
MAX	80	52	39	35	28	26	56	290	488	365	164	74
MIN	52	37	33	29	25	22	21	64	210	169	73	58
AC-FT	4120	2650	2210	1920	1500	1480	2160	9390	22080	16440	6900	3900

CAL YR 1984	TOTAL	42013	MEAN	115	MAX	520	MIN	17	AC-FT	83330
WTR YR 1985	TOTAL	37685	MEAN	103	MAX	488	MIN	21	AC-FT	74750

09076520 OWL CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°13'25", long 106°52'45", in NE¼SE¼ sec.33, T.9 S., R.85 W., Pitkin County, Hydrologic Unit 14010004, on left bank 1.2 mi upstream from mouth and 3.8 mi northwest of Aspen.

DRAINAGE AREA.--6.60 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder with V-notch concrete control. Elevation of gage is 7,870 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 25-28, Jan. 14 to Mar. 12. Records good except for estimated daily discharges, which are poor. Several small diversions above station for irrigation of hay meadows. Water imported above station, at times, from West Willow Creek through Willow and Owl ditches. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--11 years, 3.20 ft^3/s; 2,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft^3/s, May 21, 1984, gage height, 2.39 ft; no flow, Feb. 9 to Mar. 6, Sept. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 78 ft^3/s at 1900 May 4, gage height, 2.24 ft; minimum daily, 0.48 ft^3/s, Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	1.7	.68	.75	.48	.96	1.7	32	26	1.7	1.7	.81
2	.68	1.4	.61	.68	.50	.92	2.5	41	24	1.6	1.7	.75
3	.68	1.6	.61	.68	.56	.92	3.6	49	23	1.8	1.7	.75
4	1.3	1.4	.61	.68	.62	.94	3.4	64	20	2.6	1.6	.68
5	2.5	1.2	.61	.75	.64	.98	5.0	66	18	2.0	1.4	.68
6	1.5	1.4	.61	.75	.58	1.1	4.3	60	11	3.0	1.3	.68
7	1.2	1.5	.61	.75	.64	1.3	5.9	59	9.0	2.9	1.2	.68
8	1.0	1.5	.61	.81	.66	1.2	7.8	59	10	1.3	1.2	.68
9	.95	1.4	.68	.81	.66	1.3	8.3	57	10	1.4	1.2	.68
10	.88	1.4	.75	.81	.64	1.4	10	62	12	1.9	.96	.68
11	.88	1.5	.75	.81	.64	1.3	11	58	9.9	2.1	.81	.81
12	.95	1.4	.75	.81	.66	1.4	13	47	6.9	2.1	.81	1.2
13	1.0	1.4	.75	.68	.68	1.5	15	41	6.1	3.6	.88	1.0
14	1.2	1.5	.75	.70	.72	1.6	17	36	5.9	3.6	.88	1.0
15	1.2	1.0	.81	.74	.74	1.7	20	34	5.0	3.4	.75	1.0
16	1.0	1.3	.88	.70	.70	1.7	21	31	4.1	3.4	.68	1.0
17	1.2	1.3	.81	.76	.70	1.7	25	30	4.1	3.8	.68	1.0
18	1.3	1.1	.81	.80	.70	2.1	28	31	3.1	5.9	.68	1.0
19	1.2	1.2	.81	.72	.74	2.6	33	32	2.6	5.2	.68	.95
20	1.4	1.2	.88	.74	.78	2.6	24	31	2.5	4.7	.68	.95
21	1.3	1.2	.88	.78	.80	2.9	21	32	1.9	6.6	.69	.95
22	1.5	1.1	.75	.74	.74	2.8	18	31	1.5	5.2	.75	1.6
23	1.3	1.1	.81	.66	.72	2.2	16	32	1.2	4.1	.68	1.9
24	1.3	.95	.88	.60	.72	2.5	15	37	1.2	4.1	.68	1.6
25	1.2	.88	.90	.62	.78	3.4	17	38	1.6	3.6	.68	1.4
26	1.0	.88	.88	.64	.78	3.1	17	40	1.6	3.1	.68	1.3
27	1.3	.68	.86	.68	.84	2.4	16	40	1.7	2.6	.88	1.3
28	1.3	.55	.84	.66	.88	2.4	19	37	1.3	2.2	.81	2.2
29	1.4	.61	.75	.68	---	1.9	22	34	1.6	2.2	.81	1.5
30	1.5	.68	.75	.64	---	1.7	26	33	1.9	2.2	.77	1.1
31	1.8	---	.75	.56	---	1.6	---	30	---	2.0	.81	---
TOTAL	37.67	36.03	23.43	22.19	19.30	56.12	446.5	1304	228.7	95.9	29.73	31.83
MEAN	1.22	1.20	.76	.72	.69	1.81	14.9	42.1	7.62	3.09	.96	1.06
MAX	2.5	1.7	.90	.81	.88	3.4	33	66	26	6.6	1.7	2.2
MIN	.68	.55	.61	.56	.48	.92	1.7	30	1.2	1.3	.68	.68
AC-FT	75	71	46	44	38	111	886	2590	454	190	59	63

CAL YR 1984	TOTAL	2417.81	MEAN	6.61	MAX	82	MIN	.12	AC-FT 4800
WTR YR 1985	TOTAL	2331.40	MEAN	6.39	MAX	66	MIN	.48	AC-FT 4620

09078600 FRYINGPAN RIVER NEAR THOMASVILLE, CO

LOCATION.--Lat 39°20'41", long 106°40'23", in NW¼NW¼ sec.21, T.8 S., R.83 W., Pitkin County, Hydrologic Unit 14010004, on right bank 400 ft upstream from private bridge, 400 ft downstream from North Fork, 1.6 mi southeast of Thomasville, and 1.7 mi northwest of Norrie.

DRAINAGE AREA.--134 mi^2.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,210 ft, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 31 to Jan. 4, Jan. 12 to Apr. 3. Records good except for estimated daily discharges, which are poor. Records good except those for winter period, which are poor. Transmountain diversions above station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972. Several observations of water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--10 years, 97.7 ft^3/s; 70,780 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,330 ft^3/s, May 25, 1984, gage height, 4.23 ft; minimum daily, 10 ft^3/s, Nov. 28, 1976, Jan. 2, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,180 ft^3/s at 2330 June 8, gage height, 4.12 ft; minimum daily, 27 ft^3/s, Feb. 2-7, 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	63	49	39	28	30	37	280	350	179	91	47
2	47	54	47	35	27	31	46	313	350	130	78	51
3	44	61	45	35	27	32	54	371	355	130	75	58
4	54	51	45	38	27	30	53	455	350	120	70	60
5	95	49	47	41	27	28	47	430	383	115	70	51
6	86	60	45	38	27	30	47	394	461	108	77	47
7	84	56	48	38	27	30	57	417	578	101	78	44
8	75	54	49	38	28	30	74	400	829	97	77	48
9	69	50	49	38	28	30	86	394	829	104	78	43
10	67	51	48	36	27	31	84	406	683	106	80	40
11	57	56	48	35	27	31	97	388	467	101	77	43
12	58	50	48	34	27	31	110	308	417	104	86	66
13	61	51	48	34	27	30	136	257	411	128	78	49
14	72	63	47	34	28	30	160	223	430	108	74	43
15	66	49	47	35	29	31	200	227	377	101	72	51
16	58	63	45	33	29	32	223	244	371	97	69	61
17	63	64	45	33	29	33	248	253	344	101	67	47
18	60	54	45	33	29	33	261	270	308	106	63	42
19	58	52	44	33	30	34	257	275	270	117	66	48
20	61	46	44	34	30	34	193	253	253	139	58	44
21	58	50	44	34	30	34	160	257	363	186	57	44
22	60	58	42	34	30	33	133	280	536	189	56	56
23	58	57	43	34	29	32	150	289	467	122	56	56
24	50	56	43	33	29	32	120	308	360	115	56	58
25	51	53	43	32	29	34	117	344	236	99	53	54
25	51	50	43	32	29	36	117	355	223	101	49	51
27	64	47	42	32	30	36	117	377	197	128	48	60
28	63	51	42	32	30	36	160	430	208	120	49	84
29	63	50	42	32	---	34	189	480	219	113	49	80
30	60	49	41	31	---	34	212	430	204	99	47	61
31	64	---	39	30	---	35	---	377	---	95	45	---
TOTAL	1938	1618	1397	1070	794	997	3945	10485	11829	3659	2049	1587
MEAN	62.5	53.9	45.1	34.5	28.4	32.2	132	338	394	118	66.1	52.9
MAX	95	64	49	41	30	36	261	480	829	189	91	84
MIN	44	46	39	30	27	28	37	223	197	95	45	40
AC-FT	3840	3210	2770	2120	1570	1980	7820	20800	23460	7260	4060	3150

CAL YR 1984 TOTAL 60423 MEAN 165 MAX 1120 MIN 25 AC-FT 119800
WTR YR 1985 TOTAL 41368 MEAN 113 MAX 829 MIN 27 AC-FT 82050

NOTE.--NO GAGE-HEIGHT RECORD JAN. 12 TO APR. 3.

09080190 RUEDI RESERVOIR NEAR BASALT, CO

LOCATION.--Lat 39°21'50", long 106°49'05", in NW¼ sec.18, T.8 S., R.84 W., Pitkin County, Hydrologic Unit 14010004, in gatehouse of Ruedi Dam just upstream from Rocky Fork Creek and 13 mi east of Basalt.

DRAINAGE AREA.--223 mi².

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in May 1968; dam completed July 16, 1968. Capacity, 102,300 acre-ft, 1969 survey, between elevations 7,540.00 ft, sill of auxiliary outlet, and 7,766.00 ft, crest of spillway. Dead storage below elevation 7,540.00 ft, 61 acre-ft. Figures given are total contents.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 103,900 acre-ft, July 15, 1973, elevation, 7,767.56 ft; minimum after first filling, 48,000 acre-ft, May 13, 1971, elevation, 7,698.03 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 102,000 acre-ft, July 22, elevation, 7,765.29 ft; minimum, 61,500 acre-ft, April 12, elevation, 7,718.10 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,763.89	100,000	-
Oct. 31	7,760.60	97,100	-2,900
Nov. 30	7,754.49	91,300	-5,800
Dec. 31	7,747.05	84,600	-6,700
CAL YR 1984			+2,400
Jan. 31	7,738.37	77,200	-7,400
Feb. 28	7,729.66	70,100	-7,100
Mar. 31	7,720.29	63,100	-7,000
Apr. 30	7,724.86	66,400	+3,300
May 31	7,752.56	89,500	+23,100
June 30	7,762.05	98,500	+9,000
July 31	7,763.85	100,000	+1,500
Aug. 31	7,758.92	95,500	-4,500
Sept. 30	7,756.48	93,200	-2,300
WTR YR 1985			-6,800

09080400 FRYINGPAN RIVER NEAR RUEDI, CO

LOCATION.--Lat 39°21'56", long 106°49'30", in SE¼SE¼ sec.12, T.8 S., R.85 W., Eagle County, Hydrologic Unit 14010004, on right bank 0.4 mi downstream from Rocky Fork Creek and Ruedi Dam, 1.5 mi west of former site of Ruedi, and 12.5 mi east of Basalt.

DRAINAGE AREA.--238 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,473.25 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Nov. 7, 1970, at site 2.0 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 24 to Jan. 28, Mar. 11-14, Aug. 29 to Sept. 6. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of hay meadows above station. Transmountain diversions above station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972 (see elsewhere in this report). Flow regulated by Ruedi Reservoir (station 09080190) since May 18, 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--18 years (water years 1968-85), 186 ft^3/s; 134,800 acre-ft/yr, subsequent to completion of Ruedi Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,690 ft^3/s, June 18, 1965, gage height, 5.16 ft, site and datum then in use; minimum daily, 16 ft^3/s, Feb. 2, 1968 (result of storage in Ruedi Reservoir); minimum daily prior to construction of Ruedi Reservoir, 28 ft^3/s, Mar. 4 ,1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,200 ft^3/s June 15, gage height, 3.61 ft; minimum daily, 45 ft^3/s, Apr. 18, 1985.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	182	185	182	170	173	176	101	341	203	210	190
2	137	182	185	182	170	173	176	111	345	203	210	190
3	137	182	185	182	173	173	176	167	345	200	210	190
4	137	182	185	182	173	173	176	281	367	200	210	190
5	137	182	185	182	173	173	176	281	390	200	207	190
6	137	185	185	182	173	173	176	281	390	200	210	187
7	137	185	185	180	173	173	176	281	413	200	207	187
8	137	185	185	178	173	173	176	281	472	190	207	191
9	137	185	185	174	170	173	176	281	649	173	207	191
10	137	185	185	174	170	176	176	281	721	173	207	200
11	137	185	185	174	170	176	176	281	875	173	207	194
12	137	185	185	174	170	174	176	281	898	173	207	179
13	137	185	185	174	170	172	173	281	998	170	207	142
14	137	185	182	174	170	176	173	281	1150	170	207	120
15	137	185	182	174	170	176	173	281	1200	170	203	120
16	154	185	182	174	170	176	173	281	1200	170	203	83
17	168	185	182	174	170	176	122	281	1200	179	203	59
18	168	188	182	174	170	176	45	281	1200	188	203	59
19	170	188	182	174	170	176	47	281	1200	191	203	69
20	170	185	182	174	170	176	97	281	1160	191	207	106
21	170	185	182	174	170	176	168	281	1030	191	203	120
22	170	185	182	174	170	176	119	281	949	231	203	120
23	170	185	182	174	170	176	55	263	938	309	207	119
24	176	185	182	174	170	173	163	240	627	321	203	117
25	182	185	182	174	170	176	165	239	306	325	200	115
26	182	185	182	174	170	176	165	239	203	325	200	115
27	182	185	182	174	170	176	165	242	207	325	200	115
28	182	185	182	174	170	176	168	246	207	325	203	117
29	182	185	182	172	---	176	168	256	203	325	203	117
30	182	185	182	176	---	176	168	239	203	286	200	117
31	182	---	182	173	---	176	---	327	---	210	195	---
TOTAL	4845	5541	5681	5451	4778	5420	4619	8009	20387	6890	6352	4209
MEAN	156	185	183	176	171	175	154	258	680	222	205	140
MAX	182	188	185	182	173	176	176	327	1200	325	210	200
MIN	137	182	182	172	170	172	45	101	203	170	195	59
AC-FT	9610	10990	11270	10810	9480	10750	9160	15890	40440	13670	12600	8350

CAL YR 1984 TOTAL 105237 MEAN 288 MAX 1140 MIN 64 AC-FT 208700
WTR YR 1985 TOTAL 82182 MEAN 225 MAX 1200 MIN 45 AC-FT 163000

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO

LOCATION.--Lat 39°13'56", long 107°13'36", in SE¼SW¼ sec.33, T.9 S., R.88 W., Pitkin County, Hydrologic Unit 14010004, on right bank 1.2 mi upstream from Avalanche Creek and 3.6 mi north of Redstone.

DRAINAGE AREA.--167 mi^2.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,905 ft, from river-profile map.

REMARKS.--Estimated daily discharges: Oct. 8 to Nov. 5, Feb. 1 to March 12. Records good except for estimated daily discharges, which are poor. A few small diversions for irrigation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years, 300 ft^3/s; 217,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,180 ft^3/s, June 25, 1983, gage height, 6.12 ft; minimum daily, 22 ft^3/s, Dec. 5, 1955, Feb. 15, 1964, Jan 2, Feb. 17, 18, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 9	0100	*3,200	*5.57	No other peak greater than base discharge.			

Minimum daily, 60 ft^3/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	150	101	91	64	78	114	729	1170	1110	355	136
2	154	140	98	63	60	80	122	826	1150	1200	386	151
3	152	150	93	69	66	78	144	982	1290	1210	372	157
4	176	140	86	83	72	76	147	1240	1410	1230	314	151
5	247	130	77	90	64	86	138	1290	1600	1210	278	144
6	211	121	77	88	62	86	152	1240	1730	1160	251	134
7	206	118	84	93	66	88	187	1240	2030	1130	248	131
8	190	127	90	96	72	90	235	1310	2570	1090	240	130
9	180	131	100	99	76	92	278	1300	2850	1080	247	122
10	170	125	94	98	76	96	300	1400	2680	999	231	119
11	170	134	101	97	64	100	369	1250	2090	973	218	140
12	160	129	97	92	72	92	416	1010	1970	955	222	172
13	180	129	96	80	76	78	485	836	2050	965	187	134
14	190	130	92	87	66	79	538	711	2140	834	176	125
15	170	114	91	85	72	87	608	670	2180	731	165	220
16	170	116	86	87	78	93	648	679	2170	699	161	195
17	180	121	82	88	76	98	652	715	2120	680	157	158
18	180	115	82	96	74	100	696	796	2180	658	156	168
19	170	111	88	92	66	102	672	827	2020	651	155	168
20	160	108	87	94	76	110	544	779	1900	681	155	196
21	160	105	84	92	78	117	512	795	1940	758	154	192
22	160	111	72	89	76	129	442	835	1940	721	158	233
23	150	111	79	82	74	124	377	989	1760	676	158	190
24	150	111	91	78	66	124	360	1170	1760	596	150	173
25	140	110	79	81	74	136	354	1300	2060	500	145	159
26	160	106	105	80	76	132	327	1400	1570	450	142	152
27	180	91	116	90	68	126	326	1590	1100	435	140	149
28	160	104	136	73	72	120	406	1690	965	402	142	394
29	150	106	116	69	---	126	559	1700	1050	360	137	265
30	150	101	113	67	---	120	625	1580	1100	360	134	200
31	150	---	113	74	---	118	---	1410	---	358	134	---
TOTAL	5278	3595	2906	2643	1982	3161	11733	34289	54545	24862	6268	5270
MEAN	170	120	93.7	85.3	70.8	102	391	1106	1818	802	202	176
MAX	247	150	136	99	78	136	696	1700	2850	1230	386	394
MIN	140	91	72	63	60	76	114	670	965	358	134	119

CAL YR 1984 TOTAL 163253 MEAN 446 MAX 2480 MIN 44
WTR YR 1985 TOTAL 156532 MEAN 429 MAX 2850 MIN 60

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°32'37", long 107°19'44", in SW¼SE¼ sec.9, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010004, on left bank at Glenwood Springs, 2,100 ft, upstream from mouth.

DRAINAGE AREA.--1,451 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1905 to September 1909, September 1910 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1960, published as Roaring Fork at Glenwood Springs.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,720.73 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1915, nonrecording gage on highway bridge 800 ft downstream, at different datum. Nov. 20, 1915, to Oct. 26, 1917, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Feb. 1-6. Records good. Diversions above station for irrigation of about 35,000 acres. Transmountain diversions to Arkansas River basin through Busk-Ivanhoe tunnel since 1925, Twin Lakes tunnel since 1935, and Charles H. Boustead tunnel since 1972. Natural flow of stream affected by storage in Ruedi Reservoir on Fryingpan River (station 09080190) since May 1968.

AVERAGE DISCHARGE.--65 years (water years 1906-9, 1911-71), 1,368 ft^3/s; 991,100 acre-ft/yr prior to diversion through Charles H. Boustead tunnel; 14 years (water years 1972-85), 1,275 ft^3/s, 923,700 acre-ft/yr, subsequent to diversions through Charles H. Boustead tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft^3/s, July 1, 1957, gage height, 8.65 ft; maximum gage height, 8.7 ft, June 14, 1921, from floodmarks; minimum discharge, 145 ft^3/s, Jan. 21, 1935, gage height, 0.65 ft; minimum daily, 179 ft^3/s, Jan. 21, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,500 ft^3/s at 0730 June 9, gage height, 7.65 ft; minimum daily, 470 ft^3/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	1130	860	721	520	544	624	2680	4330	3300	1720	800
2	988	1100	850	590	470	568	655	2890	4100	3420	1720	839
3	976	1110	821	592	500	560	768	3520	4330	3450	1780	903
4	1070	1100	820	647	544	537	819	4420	4470	3470	1630	928
5	1330	1070	761	672	500	520	722	4800	4960	3510	1500	884
6	1230	1110	740	680	520	575	759	4650	5320	3420	1410	841
7	1180	1060	769	700	544	568	858	4510	6030	3340	1370	820
8	1140	1040	839	720	560	568	962	4600	8280	3210	1320	849
9	1120	1050	860	691	584	576	1110	4610	9690	3240	1280	830
10	1110	1000	821	657	568	615	1170	4690	9610	3170	1270	801
11	1080	1020	849	630	507	698	1270	4580	8040	3050	1230	800
12	1080	1020	850	632	551	673	1360	4150	6800	2920	1240	972
13	1120	1000	830	577	544	625	1540	3560	6860	3200	1160	894
14	1170	1000	801	600	528	616	1710	3090	7260	2930	1100	792
15	1170	941	810	608	544	624	1980	2940	7590	2610	1020	849
16	1170	928	790	619	552	648	2300	2830	7760	2490	988	985
17	1230	987	800	616	560	656	2470	2890	7430	2420	966	833
18	1250	941	771	647	552	664	2600	3050	7570	2380	953	781
19	1230	905	800	648	536	672	2740	3150	7060	2400	978	925
20	1240	861	790	648	560	690	2330	2980	6580	2550	953	916
21	1230	840	790	648	568	700	2240	2940	6430	2730	945	937
22	1240	879	702	640	552	690	2020	3040	6380	2910	940	975
23	1230	892	665	592	552	649	1860	3260	5860	2780	959	988
24	1190	880	738	584	521	640	1740	3600	5740	2650	905	929
25	1160	880	701	613	551	689	1790	4020	6000	2430	878	893
26	1140	880	769	600	544	729	1750	4310	4980	2250	851	861
27	1220	796	799	616	521	691	1660	4630	3930	2210	849	860
28	1180	878	826	601	551	665	1860	4920	3320	2120	860	1100
29	1160	892	771	584	---	664	2110	5390	3380	2020	840	1250
30	1160	870	741	576	---	625	2280	5460	3400	1960	830	1040
31	1130	---	750	537	---	632	---	4990	---	1780	810	---
TOTAL	35924	29060	24484	19486	15104	19571	48057	121150	183490	86320	35255	27075
MEAN	1159	969	790	629	539	631	1602	3908	6116	2785	1137	903
MAX	1330	1130	860	721	584	729	2740	5460	9690	3510	1780	1250
MIN	976	796	665	537	470	520	624	2680	3320	1780	810	781
AC-FT	71260	57640	48560	38650	29960	38820	95320	240300	364000	171200	69930	53700

CAL YR 1984 TOTAL 785091 MEAN 2145 MAX 9510 MIN 492 AC-FT 1557000
WTR YR 1985 TOTAL 644976 MEAN 1767 MAX 9690 MIN 470 AC-FT 1279000

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°33'18", long 107°20'13", in NW¼NW¼ sec.9, T.6 S., R.89W., Garfield County, Hydrologic Unit 14010005, on left bank 0.6 mi downstream from Roaring Fork River and 1.0 mi northwest of Post Office in Glenwood Springs.

DRAINAGE AREA.--6,013 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,700.75 ft above National Geodetic Vertical Datum of 1929 (Colorado State Highway Department benchmark).

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of 110,000 acres.

AVERAGE DISCHARGE.--19 years, 3,588 ft^3/s; 2,600,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,500 ft^3/s, May 25, 1984, gage height, 12.49 ft; minimum daily, 870 ft^3/s, Feb. 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,600 ft^3/s at 1230 June 9, gage height, 10.35 ft, (from peak-stage indicator); minimum daily, 1,580 ft^3/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3070	2900	2720	2340	1730	2140	1980	7760	12700	8030	4930	2370
2	2840	2950	2630	1900	1580	2110	1940	8600	12000	7870	4800	2310
3	2800	2930	2500	1750	1740	2060	1990	10200	12500	7700	4730	2360
4	3020	2850	2510	1950	1940	1970	2360	12100	12500	7440	4400	2390
5	3280	2820	2370	2070	1910	1950	2700	13700	13000	7270	4180	2410
6	3270	2840	2290	2190	1840	2050	2560	13900	13800	7140	3970	2330
7	3200	2820	2270	2280	1950	2050	2680	13700	14800	7050	3750	2230
8	3150	2820	2430	2490	2080	2030	3070	14200	17800	6930	3610	2140
9	3060	2840	2680	2430	2250	2040	3600	14300	20300	6790	3510	2110
10	3010	2690	2670	2340	2170	2120	3910	14300	20300	6590	3460	2070
11	2980	2710	2720	2240	1960	2470	4070	14500	18400	6350	3400	2070
12	2930	2740	2730	2220	1990	2350	4440	13300	16300	6020	3480	2280
13	3010	2750	2640	1970	2090	2180	4820	12000	15700	6250	3410	2270
14	3090	2800	2480	1890	2110	2140	5040	10600	15900	6400	3240	2140
15	3180	2720	2490	2010	2050	2170	5570	9900	15900	6050	3110	2150
16	3180	2710	2500	2070	2030	2250	6260	9540	16000	5870	2990	2390
17	3210	2610	2500	2220	2090	2280	6930	9660	15500	5770	2870	2280
18	3220	2560	2420	2300	2070	2320	7410	10000	15400	5790	2770	2220
19	3190	2450	2520	2390	2000	2360	7960	10400	14500	5980	2800	2370
20	3130	2430	2490	2410	2050	2560	7320	10300	13800	6740	2750	2330
21	3100	2360	2470	2430	2090	2470	6690	10100	13700	7480	2710	2360
22	3120	2540	2300	2380	2070	2730	6110	10200	13400	7940	2670	2440
23	3150	2660	2110	2240	2060	2420	5510	10500	12500	7850	2680	2550
24	3160	2680	2310	2090	2030	2370	5410	11200	12000	7490	2580	2460
25	3060	2730	2310	2030	2080	2470	5380	12100	12500	7010	2530	2410
26	2980	2690	2390	2120	2070	2780	5370	12800	11600	6400	2460	2350
27	3110	2520	2630	2290	2020	2740	5180	13300	9760	6240	2420	2340
28	3000	2600	2640	2310	2100	2540	5500	14000	8660	5970	2440	2610
29	3020	2690	2520	2310	---	2390	6240	14700	8500	5790	2440	2980
30	3030	2690	2430	2240	---	2230	6690	14800	8400	5650	2440	2710
31	2990	---	2440	2060	---	1990	---	13900	---	5240	2400	---
TOTAL	95540	81100	77110	67960	56150	70730	144690	370560	418120	207090	99930	70430
MEAN	3082	2703	2487	2192	2005	2282	4823	11950	13940	6680	3224	2348
MAX	3280	2950	2730	2490	2250	2780	7960	14800	20300	8030	4930	2980
MIN	2800	2360	2110	1750	1580	1950	1940	7760	8400	5240	2400	2070

CAL YR 1984 TOTAL 2346240 MEAN 6410 MAX 30200 MIN 1520
WTR YR 1985 TOTAL 1759410 MEAN 4820 MAX 20300 MIN 1580

09085200 CANYON CREEK ABOVE NEW CASTLE, CO

LOCATION.--Lat 39°36'19", long 107°26'52", in NW¼NW¼ sec.24, T.5 S., R.90 W., Garfield County, Hydrologic Unit 14010005, on right bank 300 ft upstream from diversion headgate, 0.4 mi upstream from East Canyon Creek, and 5.0 mi northeast of New Castle.

DRAINAGE AREA.--23.8 mi^2.

PERIOD OF RECORD.--March 1969 to current year.

REVISED RECORDS.--WRD Colo. 1973: 1972(M).

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. A few small diversions for irrigation of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years, 53.8 ft^3/s; 38,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 966 ft^3/s, June 19, 1983, gage height, 5.78 ft, (from floodmarks) site then in use; maximum gage height 7.85 ft, June 8, 1985; minimum daily discharge, 2.6 ft^3/s, Jan. 2, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 28	0400	474	7.38	June 8	2300	*800	*7.85

Minimum daily discharge, 11 ft^3/s, Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	29	21	15	16	14	19	104	262	135	46	19
2	26	28	20	11	16	14	19	116	257	126	44	21
3	25	29	20	12	15	14	21	135	300	119	41	21
4	28	28	20	14	16	14	21	156	340	111	39	20
5	35	28	19	17	16	14	20	192	440	106	38	19
6	38	28	20	19	15	14	20	196	502	100	36	18
7	40	26	20	19	15	14	21	179	571	95	34	17
8	39	26	20	19	15	14	23	232	651	89	32	17
9	37	26	20	18	14	14	28	286	389	84	31	17
10	35	25	19	17	15	16	31	292	326	78	30	17
11	33	27	20	17	15	21	38	230	423	72	30	18
12	34	27	17	16	16	18	46	145	434	75	32	19
13	33	25	20	16	15	17	55	125	427	69	28	18
14	35	26	21	17	15	16	60	111	426	66	28	17
15	34	25	20	16	15	17	69	104	422	64	27	17
16	33	25	20	16	15	17	77	104	443	63	27	17
17	31	25	18	16	15	17	83	109	395	61	26	17
18	30	24	21	16	14	18	93	118	368	61	26	18
19	30	24	20	16	15	18	101	123	358	59	26	20
20	31	23	19	16	15	18	93	122	371	60	26	20
21	30	23	19	17	15	18	85	129	366	66	25	20
22	30	24	18	16	14	18	78	143	331	61	25	23
23	31	23	16	15	14	18	69	213	292	58	24	21
24	29	23	18	16	14	18	66	367	263	62	24	22
25	28	23	18	16	14	18	63	400	262	58	23	22
26	28	21	18	16	14	19	60	421	237	53	22	22
27	29	19	20	16	14	20	57	417	173	52	22	22
28	29	21	18	16	14	19	65	403	159	51	22	24
29	29	22	18	16	---	20	79	396	151	50	21	25
30	29	21	19	16	---	19	90	329	144	50	20	27
31	29	---	19	13	---	19	---	308	---	49	20	---
TOTAL	971	744	596	496	416	525	1650	6705	10483	2303	895	595
MEAN	31.3	24.8	19.2	16.0	14.9	16.9	55.0	216	349	74.3	28.9	19.8
MAX	40	29	21	19	16	21	101	421	651	135	46	27
MIN	23	19	16	11	14	14	19	104	144	49	20	17
AC-FT	1930	1480	1180	984	825	1040	3270	13300	20790	4570	1780	1180

CAL YR 1984 TOTAL 25849 MEAN 70.6 MAX 531 MIN 10 AC-FT 51270
WTR YR 1985 TOTAL 26379 MEAN 72.3 MAX 651 MIN 11 AC-FT 52320

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO

LOCATION.--Lat 39°19'52", long 107°34'46", in NE¼SW¼ sec.29, T.8 S., R.91 W., Mesa County, Hydrologic Unit 14010005, on left bank 10 ft, downstream from private road bridge, 0.8 mi upstream from Brook Creek, 8 mi south of Raven, and 16 mi south of Silt.

DRAINAGE AREA.--64.6 mi².

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,050 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 17-20, Nov. 10 to Dec. 15, Dec. 21-26, 28, Jan. 8, Jan. 29 to Feb. 2, Feb. 19, 24, 26-27, Mar. 1-2, 4-5, 8, 22-23, 25-26. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by water imported from Thompson Creek (Roaring Fork basin), Muddy Creek (Muddy Creek basin), and Buzzard Creek (Plateau Creek basin). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years, 35.7 ft³/s; 25,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s, May 14, 1984, gage height, 5.83 ft, from rating curve extended above 670 ft³/s; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr 18	2300	288	4.38	May 23	2300	536	4.89
May 4	2200	*770	*5.40				

Minimum daily discharge, 2.3 ft³/s, Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	18	9.6	8.8	6.0	6.4	12	356	266	45	17	2.5
2	8.4	16	9.3	8.4	6.2	6.4	13	461	241	44	18	3.0
3	8.4	17	9.0	8.4	7.0	6.5	24	489	228	44	22	3.3
4	18	15	9.0	8.6	7.5	6.4	27	589	206	43	16	3.4
5	29	15	8.6	9.0	7.6	6.4	21	603	215	42	14	4.0
6	18	15	8.6	9.2	7.4	6.4	26	561	229	41	13	2.6
7	13	13	8.6	9.4	7.4	7.3	35	561	233	39	11	2.6
8	11	13	9.0	9.4	7.4	9.9	48	523	241	37	11	3.0
9	10	11	9.4	9.5	6.7	6.7	68	457	230	35	10	2.6
10	9.1	9.6	9.4	8.6	6.7	8.4	87	547	212	34	9.4	2.3
11	9.1	10	9.0	8.2	6.5	10	107	488	180	31	9.0	2.5
12	10	9.6	9.0	7.8	6.4	10	112	424	146	31	9.2	5.4
13	16	10	9.0	7.7	6.4	11	137	368	132	33	8.0	3.8
14	21	11	9.0	7.7	6.2	13	155	344	122	27	7.4	2.9
15	18	9.6	9.0	8.0	6.2	13	172	344	116	24	7.0	4.7
16	17	9.2	9.4	8.2	6.6	12	185	348	117	22	6.6	8.8
17	16	9.0	9.3	8.0	6.4	14	227	373	101	24	6.4	4.5
18	16	8.9	9.4	8.2	6.5	12	218	362	91	31	6.3	3.4
19	15	9.0	9.1	8.2	6.2	13	252	400	81	28	6.2	3.7
20	16	8.8	9.1	7.9	6.4	14	232	357	80	33	6.3	3.8
21	17	8.6	9.0	7.8	6.4	16	218	356	83	35	6.2	6.9
22	17	9.2	8.6	7.8	6.8	13	192	422	81	42	5.9	7.5
23	17	9.4	8.4	7.4	6.2	13	187	455	82	43	5.3	8.0
24	16	9.6	8.0	7.4	6.2	13	203	466	83	34	4.7	5.5
25	16	9.6	8.4	7.4	6.2	12	206	467	118	30	4.2	4.5
26	19	9.4	9.2	7.4	6.2	13	189	419	99	28	3.4	4.0
27	19	9.1	9.7	7.4	6.2	13	207	399	78	26	3.0	3.7
28	17	9.4	9.8	7.4	6.2	16	250	398	63	21	2.9	5.6
29	16	9.6	9.4	7.3	---	15	274	378	53	24	2.8	8.2
30	18	9.6	9.2	7.0	---	16	307	361	47	29	2.6	5.6
31	18	---	9.0	6.8	---	13	---	327	---	21	2.7	---
TOTAL	475.5	331.2	280.5	250.3	184.1	345.8	4391	13403	4254	1021	257.5	132.3
MEAN	15.3	11.0	9.05	8.07	6.57	11.2	146	432	142	32.9	8.31	4.41
MAX	29	18	9.8	9.5	7.6	16	307	603	266	45	22	8.8
MIN	6.5	8.6	8.0	6.8	6.0	6.4	12	327	47	21	2.6	2.3
AC-FT	943	657	556	496	365	686	8710	26580	8440	2030	511	262

CAL YR 1984 TOTAL 28477.4 MEAN 77.8 MAX 932 MIN 1.9 AC-FT 56480
WTR YR 1985 TOTAL 25326.2 MEAN 69.4 MAX 603 MIN 2.3 AC-FT 50230

09093000 PARACHUTE CREEK NEAR PARACHUTE, CO

LOCATION.--Lat 39°34'26", long 108°06'39", in SE¼NE¼ sec.36, T.5 S., R.96 W., Garfield County, Hydrologic Unit 14010006, on left bank 0.70 mi upstream from Gardner Gulch, 0.20 mi downstream from confluence of West and East Forks, and 8.5 mi north of Parachute.

DRAINAGE AREA.--141 mi^2.

PERIOD OF RECORD.--Streamflow records, October 1948 to September 1954, October 1964 to September 1970, April 1975 to current year. Prior to October 1979, published as near Grand Valley. Water-quality data available, November 1974 to October 1981.

GAGE.--Water-stage recorder. Elevation of gage is 5,795 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 1, 1975, at sites 0.05 mi downstream, at different datums.

REMARKS.--Estimated daily discharges: Feb. 1, July 9, July 15-25. Records good. Diversions for irrigation of about 75 acres above station. One diversion from East Fork bypasses station for irrigation of about 100 acres below station.

AVERAGE DISCHARGE.--22 years (water years 1949-54, 1965-70, 1976-85), 31.4 ft^3/s; 22,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,310 ft^3/s, Aug. 19, 1977, gage height, 6.11 ft, from highwater mark, from rating curve extended above 150 ft^3/s, on basis of slope-area measurements at gage heights 4.25 ft, and 6.11 ft; no flow Dec. 2, 1948, many days 1964-67 and 1976-77.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 20	0200	820	4.32	May 11	0800	*1,450	*4.47
May 2	1700	1,270	4.21				

Minimum daily discharge, 7.7 ft^3/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	20	12	12	8.8	8.9	25	1020	221	87	39	26
2	29	21	11	11	7.7	8.9	28	1110	212	85	39	26
3	24	21	11	11	9.1	8.8	32	1070	205	84	39	26
4	24	20	11	11	9.2	8.6	34	1070	188	80	38	27
5	24	20	9.9	11	8.2	8.6	41	1160	175	80	36	26
6	24	19	10	12	9.5	9.0	53	1030	163	77	36	24
7	23	18	10	12	9.5	9.1	71	882	153	74	35	23
8	22	17	11	12	9.5	9.5	108	889	144	49	35	23
9	22	17	11	12	9.8	9.8	165	1030	139	46	35	22
10	21	16	10	12	9.7	11	259	1210	134	45	35	21
11	21	16	10	12	9.7	11	344	1410	128	46	34	21
12	24	16	10	12	9.9	11	442	1380	127	46	34	21
13	23	17	10	11	10	11	495	1090	122	46	33	21
14	23	16	11	11	10	11	521	741	116	45	32	21
15	22	15	11	11	11	12	567	594	116	45	32	22
16	21	15	11	11	11	12	602	554	113	44	31	22
17	21	15	11	11	11	12	714	504	107	44	31	21
18	22	14	11	11	11	12	765	475	103	46	31	21
19	21	14	11	11	9.9	13	784	443	101	47	30	22
20	21	14	11	11	9.2	14	781	426	98	49	30	20
21	21	14	11	11	9.2	16	719	409	94	50	29	20
22	21	14	11	11	9.0	17	600	380	96	52	28	20
23	21	14	11	11	8.8	18	531	355	96	50	27	20
24	20	13	11	11	8.9	19	498	349	95	49	25	20
25	19	13	11	11	9.0	21	502	342	104	47	25	20
26	19	13	11	11	8.9	24	480	333	108	46	24	20
27	20	12	11	11	8.9	23	495	316	100	45	23	20
28	20	12	11	11	8.7	23	551	289	94	44	23	20
29	20	12	11	11	---	23	643	270	89	43	26	20
30	21	12	11	11	---	21	750	249	88	44	26	20
31	21	---	12	9.4	---	24	---	238	---	41	26	---
TOTAL	679	470	335.9	347.4	265.1	440.2	12600	21618	3829	1676	967	656
MEAN	21.9	15.7	10.8	11.2	9.47	14.2	420	697	128	54.1	31.2	21.9
MAX	29	21	12	12	11	24	784	1410	221	87	39	27
MIN	19	12	9.9	9.4	7.7	8.6	25	238	88	41	23	20
AC-FT	1350	932	666	689	526	873	24990	42880	7590	3320	1920	1300

CAL YR 1984	TOTAL	33446.7	MEAN	91.4	MAX	1700	MIN	3.8	AC-FT 66340
WTR YR 1985	TOTAL	43883.6	MEAN	120	MAX	1410	MIN	7.7	AC-FT 87040

09093700 COLORADO RIVER NEAR DE BEQUE, CO

LOCATION.--Lat 39°21'45", long 108°09'07", in NE¼SW¼ sec.7, T.8 S., R.96 W., Mesa County, Hydrologic Unit 14010006, on left bank 3.0 mi downstream from Alkali Creek and 3.8 mi northeast of De Beque.

DRAINAGE AREA.--7,370 mi².

PERIOD OF RECORD.--Streamflow records, October 1966 to current year. Water-quality data available, August 1973 to September 1982. Sediment data available, October 1974 to September 1976.

GAGE.--Water-stage recorder. Elevation of gage is 4,940 ft from National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 31 to Feb. 12. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of about 158,000 acres. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 3,955 ft³/s; 2,865,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,200 ft³/s, May 26, 1984, gage height, 14.83 ft; minimum daily, 914 ft³/s, Dec. 22, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,000 ft³/s at 1800 June 10, gage height, 12.22 ft; minimum daily, 1,800 ft³/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3340	3340	3020	2720	1900	2430	2460	10500	16000	8860	5250	2360
2	3360	3330	3040	2470	1800	2480	2460	11500	14500	8530	5040	2350
3	3180	3330	2900	2080	2100	2450	2590	13400	14800	8370	5000	2360
4	3240	3310	2880	2160	2200	2320	2870	15800	14900	7940	4690	2400
5	3590	3240	2800	2400	2100	2220	3100	18400	15200	7760	4430	2400
6	3760	3200	2660	2490	2200	2350	3140	19000	16000	7570	4220	2380
7	3680	3240	2610	2610	2300	2480	3200	18700	17000	7330	3990	2300
8	3620	3200	2700	2820	2450	2410	3530	19000	19600	7120	3750	2230
9	3500	3290	2880	2780	2530	2400	4170	19200	23000	6880	3620	2170
10	3420	3180	3100	2690	2400	2680	4880	19000	24500	6700	3560	2130
11	3400	3090	3040	2610	2300	3620	5140	19600	23500	6400	3520	2150
12	3480	3140	3180	2550	2350	3340	5570	18100	20500	6110	3540	2260
13	3420	3120	3090	2420	2360	2780	6170	16000	19000	6180	3540	2350
14	3560	3170	2940	2250	2380	2550	6560	14000	18900	6660	3360	2260
15	3640	3170	2830	2230	2360	2530	7170	12900	19000	6160	3240	2230
16	3660	3090	2850	2310	2340	2720	8110	12100	18900	5850	3070	2360
17	3720	3060	2850	2530	2360	2720	9100	12300	18500	5800	2990	2380
18	3760	2960	2780	2610	2380	2750	9880	12700	18300	5950	2830	2340
19	3720	2940	2780	2670	2340	2770	11000	13200	17400	6080	2780	2380
20	3660	2750	2850	2740	2340	2820	10600	13300	16200	6960	2750	2430
21	3660	2800	2830	2750	2410	2880	10300	12900	15600	8050	2670	2430
22	3580	2750	2750	2750	2410	3160	8970	13000	15300	7990	2620	2490
23	3620	2990	2420	2610	2340	2760	7900	13100	14200	8540	2620	2640
24	3620	3010	2490	2480	2350	2770	7470	13800	13400	8000	2580	2590
25	3560	3090	2770	2360	2340	2750	7460	14800	13500	7690	2520	2530
26	3440	3090	2660	2350	2360	3030	7460	15900	13600	6970	2460	2490
27	3500	2980	2950	2480	2320	3220	7190	16800	11500	6630	2380	2450
28	3580	2830	3210	2610	2350	3070	7400	17500	9930	6370	2380	2480
29	3420	3020	3020	2590	---	2900	8290	18200	9340	6110	2380	3060
30	3480	3070	2860	2560	---	2720	9340	18600	9180	6020	2380	2900
31	3480	---	2780	2200	---	2530	---	17500	---	5690	2380	---
TOTAL	109650	92780	88520	77880	64370	84610	193480	480800	491250	217270	102540	72280
MEAN	3537	3093	2855	2512	2299	2729	6449	15510	16380	7009	3308	2409
MAX	3760	3340	3210	2820	2530	3620	11000	19600	24500	8860	5250	3060
MIN	3180	2750	2420	2080	1800	2220	2460	10500	9180	5690	2380	2130
AC-FT	217500	184000	175600	154500	127700	167800	383800	953700	974400	431000	203400	143400

CAL YR 1984 TOTAL 2741680 MEAN 7491 MAX 37400 MIN 1700 AC-FT 5438000
WTR YR 1985 TOTAL 2075430 MEAN 5686 MAX 24500 MIN 1800 AC-FT 4117000

09095500 COLORADO RIVER NEAR CAMEO, CO

LOCATION.--Lat 39°14'20", long 108°16'00", in SW¼SW¼ sec.30, T.9 S., R.97 W., Mesa County, Hydrologic Unit 14010006, on left bank 100 ft north of U.S. Highways 6 and 24, 0.5 mi upstream from Jackson Canyon, 5.9 mi upstream from Grand Valley project diversion dam, and 7 mi northeast of Cameo.

DRAINAGE AREA.--8,050 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year.

REVISED RECORDS.--WRD Colo. 1973: 1970.

GAGE.--Water-stage recorder. Datum of gage is 4,813.73 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 10, 1934, nonrecording gage on river and water-stage recorder on Highline Canal, about 10 mi downstream at different datum. Oct. 10, 1934, to Feb. 27, 1958, water-stage recorder at site 3.0 mi downstream at datum 22.55 ft, lower.

REMARKS.--Estimated daily discharges: Feb. 2-16, May 16 to June 4, Aug. 1-7. Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversion for irrigation of about 160,000 acres.

AVERAGE DISCHARGE.--52 years, 3,940 ft³/s; 2,855,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,300 ft³/s, May 26, 1984, gage height, 14.36 ft, minimum daily, 700 ft³/s, Dec. 29, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,500 ft³/s at 2100 June 9, gage height, 13.33 ft, minimum daily, 2,000 ft³/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3550	3500	3160	2900	2230	2690	2590	10900	18100	8870	5600	2730
2	3890	3460	3180	2790	2000	2760	2630	12400	17000	8380	5200	2690
3	3540	3470	3080	2350	2250	2740	2760	14100	16200	8390	5050	2660
4	3550	3460	3030	2360	2310	2590	2910	16300	16000	8010	4900	2660
5	4080	3390	3020	2590	2250	2480	3110	18500	15800	7880	4600	2660
6	4280	3350	2850	2720	2300	2470	3160	19700	16600	7640	4350	2660
7	4160	3390	2860	2800	2420	2560	3060	20000	17700	7390	4150	2600
8	3790	3370	2930	2900	2510	2480	3390	19700	20600	7220	3840	2430
9	3910	3400	2970	2870	2700	2470	3840	19800	24300	6980	3830	2400
10	3830	3360	3150	2730	2580	2810	4420	19400	25800	6880	3790	2380
11	3580	3230	3120	2660	2450	3660	4720	20500	24700	6680	3750	2400
12	3700	3290	3270	2610	2480	3440	5090	19000	21100	6390	3670	2280
13	3590	3290	3190	2560	2500	2940	5610	17000	19600	6390	3670	2310
14	3680	3300	3090	2340	2550	2710	5870	14800	19600	6770	3620	2310
15	3690	3320	2970	2350	2550	2670	6460	13600	19700	6300	3500	2300
16	3740	3250	2980	2380	2530	2790	7440	13100	19600	6040	3350	2360
17	3780	3240	2980	2570	2530	2800	8440	13000	19100	6010	3230	2430
18	3850	3160	2950	2630	2550	2810	9470	13400	18900	6220	3120	2320
19	3770	3140	2970	2670	2480	2800	10800	13800	18500	6180	3070	2400
20	3750	2970	3000	2730	2480	2830	10600	14000	16700	7000	3000	2450
21	3780	3010	2960	2740	2690	2930	10800	13600	16200	8850	3000	2470
22	3700	3000	2920	2750	2610	3060	9350	14000	16000	8370	2950	2530
23	3690	3120	2640	2650	2530	2840	8380	14900	14900	9090	2910	2640
24	3700	3160	2630	2580	2540	2840	7680	15200	14000	8380	2840	2660
25	3670	3230	2870	2460	2550	2820	7820	16000	13800	7980	2780	2620
26	3570	3230	2780	2450	2600	3010	7850	17000	14100	7170	2770	2600
27	3590	3150	2980	2530	2560	3220	7620	18000	11900	6720	2730	2590
28	3620	3020	3370	2790	2600	3140	7940	19000	9970	6510	2780	2580
29	3530	3150	3220	2660	---	2980	8290	19800	9200	6270	2750	3030
30	3570	3190	3030	2610	---	2820	9220	20000	9080	6110	2720	3090
31	3560	---	2930	2510	---	2710	---	19200	---	5840	2700	---
TOTAL	115690	97600	93080	81240	69330	87870	191320	509700	514750	222910	110220	76240
MEAN	3732	3253	3003	2621	2476	2835	6377	16440	17160	7191	3555	2541
MAX	4280	3500	3370	2900	2700	3660	10800	20500	25800	9090	5600	3090
MIN	3530	2970	2630	2340	2000	2470	2590	10900	9080	5840	2700	2280
AC-FT	229500	193600	184600	161100	137500	174300	379500	1011000	1021000	442100	218600	151200

CAL YR 1984 TOTAL 2862240 MEAN 7820 MAX 38000 MIN 1700 AC-FT 5677000
WTR YR 1985 TOTAL 2169950 MEAN 5945 MAX 25800 MIN 2000 AC-FT 4304000

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1933 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1935 to current year.
WATER TEMPERATURES: April 1949 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1982.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Chemical-quality data furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum , 1,970 microsiemens Jan. 19, 1940; minimum , 230 microsiemens June 2,3 1984.
WATER TEMPERATURES: Maximum, 24°C Aug. 16, 1962; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,170 microsiemens Sept. 12 (may have been exceeded during period of missing record during August); minimum, 323 microsiemens June 19.
WATER TEMPERATURES: Maximum recorded, 22.5°C Aug. 22,29, and 31 (may have been exceeded during period of missing record Aug.8-14); minimum, 0.0°C several days during January and February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT										
02...	1100	4130	900	--	10.0	200	59	14	98	3
NOV										
02...	0900	3430	808	8.4	7.0	220	61	17	78	2
DEC										
06...	1000	2660	880	--	1.0	220	61	17	94	3
JAN										
09...	1030	2840	825	--	3.0	220	59	17	90	3
FEB										
22...	1015	2530	900	--	4.0	230	62	18	99	3
MAR										
13...	1000	2840	940	--	6.0	260	70	20	99	3
26...	1015	2940	940	--	8.5	240	64	20	98	3
APR										
04...	1100	2890	1120	--	10.0	280	72	24	120	3
16...	1130	8140	565	--	11.0	190	50	17	47	2
MAY										
01...	1000	13100	565	--	11.5	190	48	18	46	1
15...	0915	13200	459	--	8.5	90	26	6.0	15	.7
JUN										
05...	1000	15600	380	--	13.0	130	37	9.0	23	.9
AUG										
28...	1245	2930	990	8.1	20.5	240	67	17	110	3
SEP										
25...	1020	2400	1000	7.6	12.0	260	74	19	100	3

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE, FET-LAB (MG/L AS HCO3)	CAR-BONATE, FET-LAB (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT									
02...	6.4	160	--	150	100	--	510	.69	5690
NOV									
02...	4.5	170	.000	120	100	--	470	.64	4350
DEC									
06...	3.3	150	.000	120	130	7.6	500	.68	3590
JAN									
09...	3.0	150	.000	120	120	7.8	490	.67	3760
FEB									
22...	3.9	160	.000	140	140	11	540	.73	3690
MAR									
13...	4.2	170	.000	180	110	11	590	.80	4520
26...	3.9	170	.000	150	120	12	540	.73	4290
APR									
04...	3.9	190	.000	200	130	11	650	.88	5070
16...	2.5	170	.000	86	43	13	340	.46	7470
MAY									
01...	2.5	170	.000	93	33	13	340	.46	12000
15...	1.2	82	.000	32	13	7.0	140	.19	4990
JUN									
05...	1.8	120	.000	46	23	8.7	210	.29	8850
AUG									
28...	3.5	180	.000	130	130	7.9	550	.75	4350
SEP									
25...	3.1	200	.000	150	130	10	590	.80	3820

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
02...	1000	4130	10500	117000	94
10...	0935	3600	37	360	66
17...	1035	3720	36	362	84
24...	1020	3670	206	2040	93
NOV					
02...	1040	3430	27	250	72
09...	0945	3410	24	221	63
14...	1000	3320	24	215	69
21...	1045	3000	17	138	71
28...	1030	2950	11	88	81
DEC					
06...	1145	2660	26	187	56
12...	1030	3270	110	971	87
19...	1040	2910	15	118	74
27...	0930	2840	39	299	81
JAN					
09...	1145	2820	49	373	79
22...	1040	2750	33	245	79
29...	1145	2620	32	226	82
FEB					
22...	1140	2530	441	3010	93
28...	1230	2580	201	1400	--
MAR					
06...	1210	2470	178	1190	92
13...	1150	2840	1120	8590	93
19...	1210	2840	420	3220	89
26...	1055	2950	500	3980	85
APR					
04...	1210	2890	2440	19000	99
11...	0930	4620	1710	21300	81
16...	1030	7330	2730	54000	74
24...	1040	7710	2760	57500	84
MAY					
01...	1055	11100	2560	76700	90
08...	1025	19800	3030	162000	73
15...	1300	13700	1100	40700	70
22...	1130	13500	682	24900	74
28...	1225	18100	687	33600	62
JUN					
05...	1225	15600	167	7030	92
11...	1235	24900	872	58600	69
19...	1415	18400	242	12000	51
26...	1230	14200	161	6170	64
JUL					
03...	1030	8290	107	2390	49
11...	1330	6600	49	873	62
17...	1330	5890	52	827	73
24...	1220	8200	376	8320	72
31...	1255	5690	509	7820	94
AUG					
07...	1040	4150	56	627	69
14...	1040	3620	48	472	79
21...	1235	3000	27	219	48
28...	1100	2800	34	257	54
SEP					
05...	1110	2660	63	452	80
11...	1310	2280	23	142	61
17...	0955	2510	158	1070	88
25...	1020	2400	159	1030	68

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	895	819	838	881	899	913	1060	550	374	453	668	990
2	831	800	843	738	965	912	1110	514	386	466	683	1000
3	819	777	841	748	1060	908	1130	457	391	481	698	1010
4	840	777	863	778	1050	928	1110	443	391	490	710	1010
5	839	785	877	827	1000	944	1050	421	389	508	719	1010
6	810	799	860	873	978	953	966	404	382	520	727	1010
7	804	807	880	906	989	941	941	401	370	528	724	1010
8	811	815	896	862	991	945	907	399	360	539	---	1020
9	812	821	876	826	938	956	843	404	345	549	---	1040
10	805	828	842	872	880	951	769	410	338	559	---	1050
11	806	844	827	864	805	933	717	414	336	566	---	1090
12	793	858	844	907	802	918	683	424	342	584	---	1140
13	784	875	868	943	814	927	656	443	346	598	---	1060
14	793	887	843	961	850	959	625	463	345	649	---	1040
15	800	875	870	990	828	941	601	481	341	584	---	1040
16	806	877	875	1010	847	951	564	484	338	596	---	1040
17	803	856	864	1030	869	940	520	481	337	598	---	1010
18	801	855	844	976	877	943	486	474	336	597	---	1020
19	803	869	862	933	883	942	463	461	332	577	---	1080
20	806	864	862	900	900	923	488	448	338	558	---	1060
21	810	886	858	865	902	897	552	441	339	617	---	1040
22	813	891	863	854	899	901	536	436	342	596	---	1050
23	817	881	863	848	906	869	633	430	348	523	---	1030
24	802	848	908	854	907	917	654	422	357	526	---	1000
25	792	838	961	891	910	937	654	409	362	521	---	1010
26	779	835	914	919	910	946	656	395	359	538	---	1010
27	784	823	889	915	909	922	650	383	356	562	---	1010
28	791	828	856	882	919	900	646	375	396	584	994	1020
29	799	823	859	862	---	948	619	370	[illegible]	604	1000	995
30	807	806	873	871	---	973	571	367	462	617	996	926
31	814	---	879	869	---	1010	---	368	---	630	998	---
MEAN	809	838	868	886	910	934	729	431	363	559	811	1030

WTR YR 1985 MEAN 760 MAX 1140 MIN 332

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.5	10.0	9.0	7.0	2.5	1.0	3.5	1.5	.5	.0	6.5	3.5
2	12.0	10.0	8.5	7.0	1.5	1.0	2.0	1.5	.5	.0	6.0	4.0
3	12.5	11.0	8.5	7.0	---	---	2.0	2.0	.5	.5	5.5	4.0
4	12.0	11.5	7.5	6.0	---	---	2.0	2.0	.5	.5	5.0	2.5
5	12.5	11.5	7.0	5.5	---	---	2.0	2.0	.5	.5	5.5	2.5
6	13.5	12.0	7.0	6.0	---	---	2.5	2.0	.5	.5	7.0	4.5
7	14.0	12.0	7.0	5.5	---	---	3.0	2.5	.5	.5	7.5	4.5
8	13.5	11.5	6.5	5.5	---	---	3.0	2.5	1.0	.5	7.5	5.0
9	13.5	11.5	6.0	5.0	---	---	4.0	3.0	1.0	1.0	8.5	6.0
10	14.0	12.0	5.5	4.5	---	---	4.0	2.5	1.0	1.0	8.0	7.0
11	14.0	12.0	6.0	4.5	---	---	4.0	3.0	1.0	1.0	8.0	6.5
12	13.0	10.5	6.5	4.5	---	---	2.5	1.5	1.0	1.0	8.5	7.0
13	11.5	9.0	6.0	5.0	2.0	1.5	1.5	1.5	2.0	1.0	8.0	6.0
14	11.0	10.0	7.0	5.5	2.5	1.5	1.5	1.5	2.5	1.0	9.5	6.0
15	10.0	8.0	6.5	5.0	2.0	1.5	1.5	1.0	3.5	1.0	10.5	7.0
16	8.5	6.5	5.5	4.5	2.5	1.5	3.0	1.0	4.0	1.5	10.5	7.5
17	7.5	6.0	5.0	4.0	2.0	1.5	2.5	2.5	4.0	3.0	11.0	8.0
18	7.0	5.5	5.0	3.5	2.5	1.5	2.5	2.0	4.5	2.5	11.5	8.5
19	6.5	5.5	5.0	3.5	3.5	2.0	3.0	2.0	5.0	2.5	11.5	9.0
20	7.0	6.0	4.5	3.0	3.5	2.5	2.5	1.5	5.0	3.5	12.0	9.0
21	7.0	6.5	4.0	3.0	3.0	2.0	2.5	2.5	6.0	3.5	11.0	9.0
22	7.5	6.5	4.0	2.5	2.5	1.0	2.5	1.0	5.5	4.0	9.5	7.5
23	8.0	7.0	4.0	2.5	1.5	1.0	1.0	.0	5.5	3.5	9.0	6.5
24	8.5	7.0	3.5	2.5	1.5	1.0	.5	.0	5.5	3.0	10.0	6.5
25	8.5	6.5	4.0	3.5	1.5	1.0	1.0	.0	5.5	3.5	10.5	7.5
26	8.5	7.0	4.0	3.0	1.5	1.0	1.0	.5	5.5	3.0	9.5	8.0
27	8.5	7.5	2.5	1.5	2.0	1.5	2.0	.5	5.5	2.5	8.0	5.5
28	7.5	6.5	3.0	2.0	3.0	2.5	3.0	1.5	6.5	3.5	6.5	5.0
29	7.5	6.0	3.0	1.5	4.5	3.0	3.0	2.0	---	---	6.0	4.0
30	8.5	7.0	3.5	2.0	4.0	3.5	2.0	1.0	---	---	6.5	3.0
31	8.5	7.5	---	---	4.5	3.5	1.0	.5	---	---	7.0	5.5
MONTH	14.0	5.5	9.0	1.5	4.5	1.0	4.0	.0	6.5	.0	12.0	2.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	5.5	13.5	11.5	12.0	10.0	18.0	15.5	21.0	19.5	21.5	19.0
2	10.5	6.5	14.0	11.0	14.5	11.0	19.0	15.5	22.0	19.5	21.0	19.0
3	12.0	8.0	14.0	11.5	14.5	12.5	19.0	16.0	21.5	20.0	21.0	18.0
4	11.0	9.5	13.5	11.5	15.0	12.5	19.5	16.5	22.0	19.0	20.5	17.5
5	10.5	7.0	13.0	11.5	15.5	13.0	19.5	16.5	21.5	19.0	19.5	17.0
6	11.5	8.0	13.0	11.5	15.5	13.5	19.5	17.0	20.5	17.5	19.0	16.0
7	12.0	9.0	13.0	11.0	15.5	13.0	20.0	17.0	20.0	17.0	17.5	15.5
8	12.0	9.5	13.0	11.0	15.5	14.0	20.0	17.5	---	---	18.0	14.0
9	12.5	11.0	12.0	11.0	15.5	14.0	20.5	17.5	---	---	18.5	15.5
10	12.5	10.0	11.5	10.5	14.0	13.5	19.5	17.0	---	---	16.5	15.0
11	12.5	10.5	11.0	9.5	14.0	12.0	20.0	17.0	---	---	15.5	14.5
12	12.5	11.0	10.0	9.0	14.5	12.0	20.5	18.0	---	---	15.5	13.0
13	12.5	10.5	9.0	7.5	15.5	13.0	20.5	19.0	---	---	16.0	12.5
14	12.5	10.0	10.0	7.0	15.5	13.5	21.0	18.5	---	---	17.0	13.5
15	12.5	10.5	12.0	8.5	15.5	13.5	21.0	18.5	20.0	17.0	16.5	15.0
16	12.5	10.5	12.5	10.5	15.5	13.5	20.5	18.0	20.0	17.5	17.0	14.0
17	12.0	10.5	13.5	10.5	15.5	13.5	21.5	19.0	20.5	17.5	17.0	14.5
18	11.5	10.0	13.0	11.5	16.0	14.0	21.5	19.0	21.5	18.5	15.5	14.5
19	11.0	9.0	12.5	11.0	16.0	14.0	22.0	19.5	21.5	18.5	16.0	13.5
20	9.0	7.0	12.0	10.0	16.0	14.0	20.5	18.5	21.0	18.0	16.0	14.5
21	8.5	5.5	12.0	10.5	17.0	14.5	20.0	18.0	22.0	19.0	16.0	13.5
22	8.5	7.5	12.5	11.0	16.5	14.5	19.0	17.5	22.5	19.5	16.0	14.0
23	10.5	7.0	14.0	11.0	16.5	14.0	19.5	17.0	21.5	18.5	15.0	12.5
24	11.5	9.0	14.0	11.5	16.5	14.0	18.5	17.0	21.0	18.0	15.5	12.5
25	11.0	8.5	14.0	11.5	15.5	14.0	18.5	17.0	21.0	17.5	14.5	12.0
26	10.0	8.0	13.5	11.5	14.5	12.5	19.5	17.0	21.5	17.5	15.0	12.0
27	12.0	8.5	13.0	11.0	15.5	12.0	20.0	17.5	21.5	18.5	15.0	11.5
28	13.5	10.5	12.5	11.0	17.5	14.0	19.5	18.0	22.0	18.5	14.0	12.0
29	13.5	12.0	13.0	11.0	17.5	15.0	19.5	17.0	22.5	18.5	13.0	10.5
30	13.5	11.5	12.5	11.0	18.5	15.0	19.0	17.5	22.0	18.5	12.0	10.0
31	---	---	11.5	10.5	---	---	19.5	17.5	22.5	18.5	---	---
MONTH	13.5	5.5	14.0	7.0	18.5	10.0	22.0	15.5	22.5	17.0	21.5	10.0
YEAR	22.5	.0										

09095526 GOVERNMENT HIGHLINE CANAL AT 16 ROAD, NEAR LOMA, CO

LOCATION.--Lat 39°15'27" long 108°45'30", in NE¼SE¼ sec.12, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 792 ft downstream from county bridge on 16 Road, 0.4 mi north of Q Road, and 5.1 mi northeast of Loma.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder and Marsh-McBirney velocity meter. Elevation of gage is 4,740 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1975 to Mar. 30, 1976, nonrecording gage 792 ft upstream, at different datum, Mar. 31, 1976 to Apr. 1, 1981, gage at site 200 ft upstream, at different datum.

REMARKS.--Estimated daily discharges: Oct. 14 to Nov. 5, Apr. 22 to May 10, Sept. 12-30. Records fair except for estimated daily discharges, which are poor. Government Highline Canal diverts water from the Colorado River in SE¼NW¼ sec.13, T.10 S., R.98 W. Water flowing past this gage is used for irrigation in Reed Wash and Salt Creek basins. Surplus flows are wasted into Reed Wash and Highline Lake. Entire flow is regulated by diversion gates. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 387 ft³/s, June 16, 1983; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	290	.00	.00	.00	.00	.00	266	320	263	273	224
2	270	292	.00	.00	.00	.00	.00	255	340	247	272	223
3	275	298	.00	.00	.00	.00	.00	243	343	261	285	222
4	287	296	.00	.00	.00	.00	.00	251	340	270	286	230
5	270	309	.00	.00	.00	.00	.00	259	332	274	280	240
6	254	331	.00	.00	.00	.00	.00	243	329	275	276	244
7	261	322	.00	.00	.00	.00	98	247	331	273	275	256
8	265	297	.00	.00	.00	.00	200	256	317	277	279	271
9	265	300	.00	.00	.00	.00	201	243	320	268	286	288
10	253	270	.00	.00	.00	.00	197	236	311	274	301	300
11	250	202	.00	.00	.00	.00	173	252	316	276	290	296
12	258	118	.00	.00	.00	.00	199	274	313	272	278	300
13	263	.00	.00	.00	.00	.00	200	317	303	267	265	290
14	256	.00	.00	.00	.00	.00	212	299	291	271	263	280
15	256	.00	.00	.00	.00	.00	217	293	289	265	273	270
16	262	.00	.00	.00	.00	.00	203	276	283	261	285	260
17	287	.00	.00	.00	.00	.00	250	264	290	264	280	250
18	307	.00	.00	.00	.00	.00	297	262	290	281	269	240
19	285	.00	.00	.00	.00	.00	359	266	289	308	269	230
20	287	.00	.00	.00	.00	.00	359	268	278	327	272	230
21	338	.00	.00	.00	.00	.00	374	276	277	323	257	230
22	334	.00	.00	.00	.00	.00	350	289	277	322	253	240
23	322	.00	.00	.00	.00	.00	328	276	276	319	277	260
24	322	.00	.00	.00	.00	.00	302	279	284	317	280	260
25	298	.00	.00	.00	.00	.00	296	285	295	309	280	265
26	296	.00	.00	.00	.00	.00	292	299	322	298	279	260
27	298	.00	.00	.00	.00	.00	294	298	311	295	273	260
28	295	.00	.00	.00	.00	.00	288	299	304	283	281	250
29	301	.00	.00	.00	---	.00	282	290	287	286	234	250
30	298	.00	.00	.00	---	.00	269	301	281	287	237	250
31	292	---	.00	.00	---	.00	---	307	---	284	235	---
TOTAL	8759	3325.00	.00	.00	.00	.00	6240.00	8469	9139	8797	8443	7669
MEAN	283	111	.00	.00	.00	.00	208	273	305	284	272	256
MAX	338	331	.00	.00	.00	.00	374	317	343	327	301	300
MIN	250	.00	.00	.00	.00	.00	.00	236	276	247	234	222
AC-FT	17370	6600	.00	.00	.00	.00	12380	16800	18130	17450	16750	15210

CAL YR 1984 TOTAL 58421.00 MEAN 160 MAX 370 MIN .00 AC-FT 115900
WTR YR 1985 TOTAL 60841.00 MEAN 167 MAX 374 MIN .00 AC-FT 120700

090955285 GOVERNMENT HIGHLINE CANAL ABOVE CAMP NO. 7 SPILLWAY, NEAR MACK, CO

LOCATION.--Lat 39°16'21", long 108°49'56", NE¼SE¼ sec.5, T.2 N., R.3W., Mesa County, Hydrologic Unit 14010005, on left bank, 72 ft upstream from Camp 7 spillway, 84 ft downstream from Lateral 48 outlet, and 4.5 mi northeast of Mack.

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder and Marsh-McBirney velocity meter. Elevation of gage is 4,720 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Government Highline Canal diverts water from the Colorado River in SE¼NW¼ sec.13, T.10 S., R.98 W. Water flowing past this gage is used for irrigation in Salt Creek basin. Surplus flows are wasted into Highline Lake. Entire flow is regulated by diversion gates. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 373 ft³/s June 8, 1984; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	282	.00	.00	.00	.00	.00	212	265	192	280	148
2	244	278	.00	.00	.00	.00	.00	191	286	155	262	153
3	247	297	.00	.00	.00	.00	.00	179	278	155	247	161
4	258	301	.00	.00	.00	.00	.00	187	266	166	242	172
5	248	299	.00	.00	.00	.00	.00	180	252	177	235	184
6	249	306	.00	.00	.00	.00	.00	146	238	194	219	192
7	245	291	.00	.00	.00	.00	.00	144	220	192	214	204
8	248	262	.00	.00	.00	.00	145	165	184	202	197	217
9	245	252	.00	.00	.00	.00	210	155	175	190	195	228
10	227	218	.00	.00	.00	.00	198	170	177	203	193	248
11	225	150	.00	.00	.00	.00	163	187	195	210	160	258
12	225	70	.00	.00	.00	.00	189	221	192	209	141	259
13	224	.00	.00	.00	.00	.00	173	274	184	198	139	231
14	222	.00	.00	.00	.00	.00	181	256	182	190	154	185
15	230	.00	.00	.00	.00	.00	175	262	197	197	178	150
16	237	.00	.00	.00	.00	.00	135	258	206	203	197	144
17	244	.00	.00	.00	.00	.00	171	252	216	204	188	148
18	254	.00	.00	.00	.00	.00	217	240	202	212	188	139
19	249	.00	.00	.00	.00	.00	268	235	187	232	168	132
20	252	.00	.00	.00	.00	.00	303	231	175	253	146	130
21	253	.00	.00	.00	.00	.00	321	230	166	248	129	129
22	259	.00	.00	.00	.00	.00	339	232	170	245	133	136
23	271	.00	.00	.00	.00	.00	335	226	180	249	142	140
24	278	.00	.00	.00	.00	.00	302	215	202	258	124	144
25	281	.00	.00	.00	.00	.00	290	213	233	248	110	150
26	274	.00	.00	.00	.00	.00	273	236	288	227	109	150
27	278	.00	.00	.00	.00	.00	279	234	285	215	101	153
28	281	.00	.00	.00	.00	.00	269	234	271	201	98	153
29	279	.00	.00	.00	---	.00	259	227	238	219	111	154
30	282	.00	.00	.00	---	.00	235	229	224	254	123	156
31	278	---	.00	.00	---	.00	---	243	---	276	137	---
TOTAL	7809	3006.00	.00	.00	.00	.00	5430.00	6664	6534	6574	5260	5148
MEAN	252	100	.00	.00	.00	.00	181	215	218	212	170	172
MAX	282	306	.00	.00	.00	.00	339	274	288	276	280	259
MIN	222	.00	.00	.00	.00	.00	.00	144	166	155	98	129
AC-FT	15490	5960	.00	.00	.00	.00	10770	13220	12960	13040	10430	10210

CAL YR 1984	TOTAL	46180.00	MEAN	126	MAX	373	MIN	.00	AC-FT	91600
WTR YR 1985	TOTAL	46425.00	MEAN	127	MAX	339	MIN	.00	AC-FT	92080

09106104 KIEFER EXTENSION GRAND VALLEY CANAL NEAR FRUITA, CO

LOCATION.--Lat 39°13'31", long 108°46'28", in SW¼SW¼ sec.24, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 300 ft upstream from small timber bridge, 1,050 ft upstream from Golden Hill Canal headgate, 1,100 ft north of O Road, and 5.0 mi north of Fruita.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,595 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 20. Records fair. Grand Valley Canal diverts water from Colorado River in SE¼NE¼ sec.3, T.1 S., R.2 E. Water flowing past this gage is used for irrigation in Reed Wash basin. Entire flow is regulated by diversion gates. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 153 ft^3/s, Sept. 22, 1980, Aug. 28, 1982; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	127	.00	.00	.00	.00	.00	130	132	127	127	132
2	144	127	.00	.00	.00	.00	.00	132	132	126	127	132
3	146	127	.00	.00	.00	.00	.00	132	132	127	127	132
4	142	126	.00	.00	.00	.00	.00	133	132	127	127	131
5	137	126	.00	.00	.00	.00	.00	133	132	126	127	130
6	138	125	.00	.00	.00	.00	.00	134	132	126	128	130
7	138	124	.00	.00	.00	.00	.00	135	132	126	129	129
8	137	128	.00	.00	.00	.00	.00	135	131	125	129	129
9	136	136	.00	.00	.00	.00	.00	135	130	125	129	129
10	139	131	.00	.00	.00	.00	44	135	130	124	129	129
11	137	128	.00	.00	.00	.00	106	135	130	124	129	127
12	136	120	36	.00	.00	.00	106	135	130	124	130	127
13	132	118	109	.00	.00	.00	108	135	130	124	130	127
14	131	120	111	.00	.00	.00	108	135	130	124	130	126
15	130	124	112	.00	.00	.00	108	135	130	124	130	126
16	129	124	113	.00	.00	.00	109	134	130	124	131	124
17	129	124	114	.00	.00	.00	110	133	130	124	131	124
18	132	124	116	.00	.00	.00	115	133	129	123	131	124
19	134	59	116	.00	.00	.00	118	133	129	124	132	124
20	135	.00	40	.00	.00	.00	119	133	129	124	132	124
21	135	.00	120	.00	.00	.00	120	133	129	124	132	122
22	132	.00	120	.00	.00	.00	124	133	127	124	132	121
23	131	.00	121	.00	.00	.00	125	133	127	125	133	121
24	132	.00	121	.00	.00	.00	126	133	127	125	133	121
25	132	.00	122	.00	.00	.00	127	133	127	125	133	121
26	133	.00	122	.00	.00	.00	127	133	127	126	133	121
27	137	.00	123	.00	.00	.00	128	133	127	126	134	121
28	130	.00	.00	.00	.00	.00	129	132	127	126	134	121
29	126	.00	.00	.00	---	.00	129	132	127	126	134	121
30	126	.00	.00	.00	---	.00	130	132	127	127	133	121
31	127	---	.00	.00	---	.00	---	132	---	127	133	---
TOTAL	4164	2318.00	1716.00	.00	.00	.00	2416.00	4134	3884	3879	4049	3767
MEAN	134	77.3	55.4	.00	.00	.00	80.5	133	129	125	131	126
MAX	146	136	123	.00	.00	.00	130	135	132	127	134	132
MIN	126	.00	.00	.00	.00	.00	.00	130	127	123	127	121
AC-FT	8260	4600	3400	.00	.00	.00	4790	8200	7700	7690	8030	7470

CAL YR 1984	TOTAL	31006.00	MEAN	84.7	MAX	150	MIN	.00	AC-FT 61500
WTR YR 1985	TOTAL	30327.00	MEAN	83.1	MAX	146	MIN	.00	AC-FT 60150

09106108 KIEFER EXTENSION GRAND VALLEY CANAL NEAR LOMA, CO

LOCATION.--Lat 39°13'40", long 108°49'06", in NW¼SE¼ sec.21, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on left bank 600 ft south of 'O' Road, 1,800 ft west of 13 Road, and 2.5 mi north of Loma.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,585 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Grand Valley Canal diverts water from Colorado River in SE¼NE¼ sec.3, T.1 S., R.2 E. Water flowing past this gage is used for irrigation in lower Reed Wash basin. Surplus flows are wasted into Reed Wash. Entire flow regulated by diversion gages. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 88 ft^3/s, June 7, 8, July 25 1982; no flow part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	59	.00	.00	.00	.00	.00	68	78	77	66	71
2	71	59	.00	.00	.00	.00	.00	71	78	75	70	75
3	70	59	.00	.00	.00	.00	.00	72	76	76	71	73
4	65	58	.00	.00	.00	.00	.00	72	75	76	72	73
5	62	57	.00	.00	.00	.00	.00	71	74	78	68	72
6	62	58	.00	.00	.00	.00	.00	71	73	77	64	70
7	62	58	.00	.00	.00	.00	.00	72	75	79	64	73
8	63	59	.00	.00	.00	.00	.00	72	73	81	66	76
9	63	59	.00	.00	.00	.00	.00	75	74	80	64	73
10	65	59	.00	.00	.00	.00	2.0	77	78	81	62	71
11	64	57	.00	.00	.00	.00	23	78	74	79	65	71
12	65	57	3.8	.00	.00	.00	45	77	76	79	65	69
13	67	55	33	.00	.00	.00	48	77	74	79	63	69
14	64	54	47	.00	.00	.00	52	76	70	79	64	67
15	61	54	52	.00	.00	.00	55	76	72	82	71	60
16	59	54	53	.00	.00	.00	57	75	74	79	71	64
17	60	54	54	.00	.00	.00	56	75	72	80	72	63
18	60	54	55	.00	.00	.00	58	75	66	73	72	61
19	59	20	52	.00	.00	.00	63	75	69	60	71	58
20	60	.00	2.1	.00	.00	.00	66	75	69	64	70	59
21	57	.00	.00	.00	.00	.00	64	75	67	66	71	59
22	55	.00	.00	.00	.00	.00	65	76	67	63	72	60
23	55	.00	.00	.00	.00	.00	65	78	74	61	73	58
24	57	.00	.00	.00	.00	.00	67	81	76	65	72	58
25	57	.00	.00	.00	.00	.00	66	83	74	69	73	59
26	57	.00	.00	.00	.00	.00	65	84	65	68	71	63
27	59	.00	.00	.00	.00	.00	65	82	72	66	70	64
28	58	.00	.00	.00	.00	.00	66	78	73	66	69	63
29	58	.00	.00	.00	---	.00	63	76	79	69	72	63
30	59	.00	.00	.00	---	.00	65	76	79	68	71	63
31	59	---	.00	.00	---	.00	---	78	---	66	71	---
TOTAL	1902	1044.00	351.90	.00	.00	.00	1176.00	2347	2196	2261	2136	1978
MEAN	61.4	34.8	11.4	.00	.00	.00	39.2	75.7	73.2	72.9	68.9	65.9
MAX	71	59	55	.00	.00	.00	67	84	79	82	73	76
MIN	55	.00	.00	.00	.00	.00	.00	68	65	60	62	58
AC-FT	3770	2070	698	.00	.00	.00	2330	4660	4360	4480	4240	3920

CAL YR 1984 TOTAL 14909.90 MEAN 40.7 MAX 81 MIN .00 AC-FT 29570
WTR YR 1985 TOTAL 15391.90 MEAN 42.2 MAX 84 MIN .00 AC-FT 30530

09108500 TAYLOR PARK RESERVOIR AT TAYLOR PARK, CO

LOCATION.--Lat 38°49'07", long 106°36'24", Gunnison County, Hydrologic Unit 14020001, at dam on Taylor River just downstream from Taylor Park, 16 mi northeast of Almont.

DRAINAGE AREA.--254 mi².

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1938, published in WSP 1313.

REVISED RECORDS.-- WSP 1089: 1940(M), 1942(M), 1945-46. WSP 1924: Drainage area.

GAGE.--Nonrecording gage read once daily. Datum of gage is 9,187 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by an earth and rockfill dam. Dam completed by U. S. Bureau of Reclamation in September 1937. Capacity of reservoir, 106,200 acre-ft between elevations 9,187 ft, bottom of outlet gates, and 9,330 ft, crest of spillway. No dead storage. Water used for irrigation in Uncompahgre Valley. Figures given are usable contents.

COOPERATION.--Records provided by Uncompahgre Valley Water Users Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 111,000 acre-ft, July 1, 1957, elevation, 9,332.35 ft; minimum after first filling, 8,780 acre-ft, Oct. 19, 20, 1956, elevation, 9,240.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 107,000 acre-ft, June 26-27, elevation, 9,330.50 ft; minimum 46,800 acre-ft, May 1, elevation, 9,293.50 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 1800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	9,321.40	89,500	-
Oct. 31	9,311.20	71,800	-17,700
Nov. 30	9,310.20	70,200	-1,600
Dec. 31	9,308.60	67,700	-2,500
CAL YR 1984			+18,000
Jan. 31	9,308.90	68,200	+500
Feb. 28	9,309.60	69,300	+1,100
Mar. 31	9,300.70	56,100	-13,200
Apr. 30	9,293.60	47,000	-9,100
May 31	9,307.20	65,500	+18,500
June 30	9,330.40	107,000	+41,500
July 31	9,330.00	106,000	-1,000
Aug. 31	9,325.90	98,100	-7,900
Sept. 30	9,313.60	75,800	-22,300
WTR YR 1985			-13,700

09109000 TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, CO

LOCATION.--Lat 38°49'06", long 106°36'31", Gunnison County, Hydrologic Unit 14020001, on left bank 1,000 ft downstream from Taylor Park Reservoir Dam, 3.4 mi upstream from Lottis Creek, and 17 mi northeast of Almont.

DRAINAGE AREA.--254 mi^2.

PERIOD OF RECORD.--June 1929 to September 1934 (monthly discharges only, published in WSP 1313), October 1938 to current year.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 9,169.67 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Nov. 11, 1952, at site 1,600 ft downstream, at datum 1.00 ft, lower. Oct. 15, 1946, to May 4, 1952, supplementary nonrecording gage just downstream from reservoir outlet at different sites and datums used during winter months.

REMARKS.--Estimated daily discharges: Nov. 15 to May 15. Records good, except for period of estimated daily discharges, which are poor. Flow regulated by Taylor Park Reservoir (station 09108500) since 1937. One small diversion for irrigation from Willow Creek above reservoir. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years (water years 1930-34), 156 ft^3/s; 113,000 acre-ft/yr; 47 years (water years 1939-85), 196 ft^3/s; 142,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,270 ft^3/s, July 1, 1957, gage height, 7.56 ft; no flow May 1 to July 3, 1940, May 7-22, 1942, May 5-21, 1943.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 774 ft^3/s at 1800 Oct. 1, gage height, 5.21 ft; minimum daily, 50 ft^3/s, Feb. 4-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	756	140	155	155	105	55	605	410	191	485	338	427
2	748	116	155	155	105	55	605	410	190	472	327	433
3	734	170	155	155	85	55	605	410	183	453	290	431
4	748	172	155	120	50	55	605	410	185	441	282	430
5	756	175	155	105	50	55	580	410	195	433	238	473
6	756	179	155	105	50	55	530	410	201	422	208	548
7	756	187	155	105	50	55	485	410	205	409	195	600
8	743	189	155	105	52	55	435	410	209	394	194	611
9	730	185	155	105	55	55	380	410	213	381	188	622
10	734	175	155	85	55	55	290	410	214	380	185	627
11	734	178	155	65	55	55	260	410	217	370	184	637
12	748	178	155	65	55	80	230	410	217	364	187	638
13	748	179	155	65	55	130	205	410	212	404	190	638
14	748	177	155	65	55	155	205	435	210	411	205	642
15	736	165	155	65	55	180	205	417	213	394	222	646
16	692	155	155	65	55	230	205	418	213	369	219	644
17	643	155	155	65	55	280	205	415	220	350	224	644
18	523	155	155	65	55	330	205	407	216	339	229	634
19	403	155	155	65	55	380	205	405	220	339	249	623
20	311	155	140	65	55	460	205	407	228	360	271	578
21	212	155	130	65	55	560	205	404	225	390	295	500
22	178	155	130	70	55	605	205	399	221	392	322	420
23	175	155	130	90	55	605	205	411	220	371	346	360
24	179	155	130	105	55	605	205	376	269	361	360	415
25	178	155	130	105	55	605	205	325	481	358	369	505
26	172	155	130	105	55	605	230	279	617	344	394	565
27	174	155	130	105	55	605	280	229	604	324	411	586
28	172	155	140	105	55	605	320	204	562	302	406	588
29	168	155	155	105	---	605	370	197	535	313	416	588
30	162	155	155	105	---	605	410	195	512	330	402	579
31	168	---	155	105	---	605	---	189	---	334	405	---
TOTAL	15685	4890	4600	2910	1647	9440	9885	11442	8398	11789	8751	16632
MEAN	506	163	148	93.9	58.8	305	330	369	280	380	282	554
MAX	756	189	155	155	105	605	605	435	617	485	416	646
MIN	162	116	130	65	50	55	205	189	183	302	184	360
AC-FT	31110	9700	9120	5770	3270	18720	19610	22700	16660	23380	17360	32990

CAL YR 1984 TOTAL 119976 MEAN 328 MAX 1430 MIN 50 AC-FT 238000
WTR YR 1985 TOTAL 106069 MEAN 291 MAX 756 MIN 50 AC-FT 210400

NOTE.--NO GAGE-HEIGHT RECORD NOV. 15 TO MAY 14.

09110000 TAYLOR RIVER AT ALMONT, CO

LOCATION.--Lat 38°39'52", long 106°50'41", in NW¼SE¼ sec.22, T.51 N., R.1 E., Gunnison County, Hydrologic Unit 14020001, on left bank at Almont, 15 ft downstream from bridge on State Highway 306, and 800 ft upstream from confluence with East River.

DRAINAGE AREA.--477 mi^2.

PERIOD OF RECORD.--July 1910 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1911. WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,010.76 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 16, 1922, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 15 to Apr. 11. Records good except for estimated daily discharges, which are poor. Flow partly regulated since September 1937 by Taylor Park Reservoir (station 09108500), 24 mi above station. Diversions for irrigation of about 360 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--75 years, 338 ft^3/s; 244,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 3,760 ft^3/s, June 9, 1920, gage height, 5.00 ft, from rating curve extended above 2,300 ft^3/s; maximum gage height, 5.32 ft, July 1, 1957; minimum discharge observed before storage began in Taylor Park Reservoir, 50 ft^3/s for several days in August 1913, gage height, 1.2 ft; minimum daily discharge, subsequent to completion of Taylor Park Dam, 24 ft^3/s, Mar. 12, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,330 ft^3/s at 0100 June 9, gage height, 3.62 ft; minimum daily, 60 ft^3/s, Feb. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	859	242	245	245	115	120	820	738	854	819	512	530
2	859	186	245	225	115	140	820	780	837	777	506	538
3	845	276	245	225	90	150	820	845	841	756	442	542
4	880	274	245	195	70	120	800	936	847	741	419	546
5	887	269	245	175	60	120	760	936	867	734	383	562
6	880	279	240	175	65	160	720	936	904	723	340	624
7	873	288	245	195	70	155	680	915	1000	702	315	702
8	859	273	245	215	100	140	640	936	1140	682	309	711
9	845	263	255	195	125	145	540	957	1220	660	299	717
10	845	249	245	145	105	145	460	1020	1150	661	293	715
11	852	263	255	130	80	170	385	1030	999	634	286	750
12	859	283	255	110	90	210	356	964	936	625	292	777
13	859	280	240	100	100	230	347	922	910	693	294	752
14	866	267	245	90	100	250	372	880	890	676	299	753
15	856	250	240	90	100	300	412	848	868	649	327	764
16	825	245	240	95	100	380	448	849	844	617	327	764
17	784	255	240	95	110	460	475	866	816	585	326	750
18	679	255	240	115	120	540	490	862	780	559	335	742
19	533	250	255	120	100	620	475	880	747	532	346	735
20	411	245	230	105	120	700	434	876	726	565	371	690
21	321	245	220	120	120	760	421	881	712	617	392	621
22	262	245	205	125	110	800	398	882	690	640	411	555
23	252	255	200	120	120	820	385	930	665	622	444	474
24	250	255	210	140	90	840	394	924	685	581	466	500
25	250	255	205	150	120	840	403	890	894	561	471	583
26	240	245	225	150	110	830	408	903	1020	546	495	638
27	248	235	245	175	110	800	439	889	984	521	509	667
28	239	250	265	150	120	800	510	913	926	497	505	673
29	235	250	275	160	---	780	586	960	890	513	521	669
30	236	245	255	145	---	800	660	960	858	537	512	655
31	237	---	265	125	---	800	---	910	---	515	503	---
TOTAL	18926	7672	7465	4600	2835	14125	15858	28018	26500	19540	12250	19699
MEAN	611	256	241	148	101	456	529	904	883	630	395	657
MAX	887	288	275	245	125	840	820	1030	1220	819	521	777
MIN	235	186	200	90	60	120	347	738	665	497	286	474
AC-FT	37540	15220	14810	9120	5620	28020	31450	55570	52560	38760	24300	39070

CAL YR 1984 TOTAL 210791 MEAN 576 MAX 2440 MIN 128 AC-FT 418100
WTR YR 1985 TOTAL 177488 MEAN 486 MAX 1220 MIN 60 AC-FT 352000

09112500 EAST RIVER AT ALMONT, CO

LOCATION.--Lat 38°39'52", long 106°50'51", in NW¼SE¼ sec.22, T.51 N., R.1 E., Gunnison County, Hydrologic Unit 14020001, on left bank at Almont, 200 ft upstream from bridge on State Highway 135, and 400 ft upstream from confluence with Taylor River.

DRAINAGE AREA.--289 mi².

PERIOD OF RECORD.--April to October 1905, July 1910 to September 1922, October 1934 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1911. WSP 1733: 1952. WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,006.29 ft above National Geodetic Vertical Datum of 1929. Apr. 16 to Sept. 30, 1905, and July 27, 1910, to Apr. 30, 1922, nonrecording gages at bridge 200 ft downstream, at different datums. Oct. 1, 1934, to Sept. 22, 1954, water-stage recorder at present site at datum 2.00 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 23 to Dec. 28, Jan. 23 to Feb. 27, May 1-14. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 7,400 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--63 years (water years 1911-22, 1935-85), 340 ft³/s; 246,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6,500 ft³/s, June 15, 1921, gage height, 6.6 ft, site and datum then in use, from rating curve extended above 3,000 ft³/s; minimum daily, 19 ft³/s, Aug. 13, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 29	0500	2,200	6.21	June 9	0800	*3,200	*7.29

Minimum daily discharge, 67 ft³/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	147	139	114	72	79	103	940	1540	862	348	166
2	160	137	136	103	67	80	105	1010	1430	856	352	170
3	162	150	133	111	75	83	119	1120	1500	831	367	189
4	195	143	140	116	77	79	129	1140	1530	851	348	187
5	206	134	129	117	74	77	114	1130	1700	857	327	184
6	172	144	130	117	76	81	135	1110	2010	814	302	165
7	169	141	133	118	73	76	149	1150	2240	794	283	143
8	172	142	137	121	77	79	170	1140	2640	802	282	143
9	168	135	141	116	75	84	189	1150	2920	792	282	142
10	165	128	134	107	71	87	184	1090	2850	750	277	141
11	161	144	134	111	68	87	205	1020	2310	714	274	147
12	158	137	133	109	72	87	237	990	2090	704	304	207
13	157	136	133	102	74	84	304	970	2050	807	296	175
14	157	139	133	104	72	81	383	980	2060	698	274	164
15	158	122	134	100	75	85	494	954	2070	650	260	176
16	151	122	132	105	79	88	629	952	2050	609	250	215
17	157	143	129	105	77	89	696	1020	1940	595	241	193
18	156	128	127	109	78	95	792	1100	1890	574	246	181
19	159	118	136	111	75	99	830	1180	1740	556	244	204
20	160	117	132	93	78	95	663	1120	1620	577	229	216
21	155	113	128	89	78	99	596	1180	1590	584	218	210
22	151	122	114	93	77	98	521	1200	1550	575	211	230
23	151	119	105	90	77	93	459	1290	1410	555	208	222
24	150	124	102	88	75	98	454	1530	1350	522	199	201
25	143	123	107	88	78	110	467	1690	1480	483	193	190
26	143	118	117	90	78	113	429	1790	1310	463	190	183
27	160	104	123	92	77	101	409	1900	1050	421	184	186
28	155	132	129	88	85	88	518	2020	904	374	181	248
29	154	138	125	88	---	100	618	2080	903	380	178	284
30	153	136	117	86	---	98	775	1990	896	361	176	233
31	151	---	122	76	---	100	---	1790	---	352	172	---
TOTAL	4969	3936	3964	3157	2110	2793	11876	39726	52623	19763	7896	5695
MEAN	160	131	128	102	75.4	90.1	396	1281	1754	638	255	190
MAX	206	150	141	121	85	113	830	2080	2920	862	367	284
MIN	143	104	102	76	67	76	103	940	896	352	172	141

CAL YR 1984 TOTAL 200256 MEAN 547 MAX 3700 MIN 53
WTR YR 1985 TOTAL 158508 MEAN 434 MAX 2920 MIN 67

09114500 GUNNISON RIVER NEAR GUNNISON, CO

LOCATION.--Lat 38°32'31", long 106°56'57", in NW¼NW¼ sec.2, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020002, on right bank 0.7 mi downstream from Antelope Creek and 1.2 mi west of Gunnison.

DRAINAGE AREA.--1,012 mi^2.

PERIOD OF RECORD.--October 1910 to December 1928, October 1944 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1911, 1916.

GAGE.--Water-stage recorder. Elevation of gage is 7,655 ft above National Geodetic Vertical Datum of 1929, from topographic map. Nov. 25, 1910, to Dec.31, 1928, nonrecording gages (supplementary water-stage recorder Apr. 28, 1916, to June 17, 1918) at bridge about 0.6 mi downstream at various datums. Oct. 1, 1944, to July 28, 1970, water-stage recorder at sites 0.4 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 27-28, Dec. 1 to Feb. 27, Apr. 11-30. Records good except for estimated daily discharges, which are poor. Flow regulated by Taylor Park Reservoir (station 09108500), 37 mi above station. Diversions for irrigation of about 22,000 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--59 years (water years 1911-28, 1945-85), 767 ft^3/s; 555,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 11,400 ft^3/s, June 13, 1918, gage height, 4.05 ft, site and datum then in use, from rating curve extended above 5,000 ft^3/s; minimum daily, 80 ft^3/s, Dec. 27, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,770 ft^3/s at 1100 June 9, gage height, 4.30 ft; minimum daily, 155 ft^3/s, Feb. 1, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	935	460	395	290	155	220	850	2300	2790	1830	1070	720
2	946	380	390	280	165	225	870	2560	2560	1780	1060	737
3	949	439	390	280	175	236	944	2960	2640	1690	1030	779
4	1020	436	395	280	155	236	989	3300	2640	1680	947	790
5	1060	420	385	300	170	220	925	3440	2810	1690	881	792
6	1010	451	380	300	170	247	967	3530	3190	1640	821	829
7	1010	452	390	290	170	230	990	3350	3580	1590	756	859
8	1000	444	390	280	180	242	1000	3400	4140	1580	730	870
9	990	444	395	270	170	260	1010	3420	4430	1560	720	877
10	979	406	390	260	170	266	947	3510	4350	1510	701	880
11	968	443	400	250	160	278	890	3420	3730	1530	690	912
12	979	436	400	230	170	290	895	3030	3400	1440	697	1050
13	990	436	385	210	185	331	950	2630	3240	1730	671	981
14	1010	444	390	205	180	377	1080	2250	3200	1530	645	947
15	1010	407	385	200	185	412	1260	2110	3210	1410	628	957
16	980	406	380	210	190	475	1460	2080	3150	1330	626	1040
17	947	439	380	210	195	526	1570	2170	3030	1320	626	1000
18	842	407	375	235	210	615	1700	2250	2910	1340	626	969
19	742	399	400	240	185	679	1720	2370	2720	1230	641	999
20	668	392	370	210	210	739	1480	2300	2570	1340	635	990
21	574	392	360	220	210	867	1380	2330	2510	1490	635	939
22	502	385	330	230	195	934	1260	2380	2450	1460	646	881
23	492	385	315	220	205	892	1160	2490	2290	1410	671	821
24	484	395	320	220	175	891	1170	2770	2220	1350	680	800
25	476	392	320	225	210	934	1190	2930	2540	1270	680	869
26	453	371	320	230	200	935	1160	3120	2560	1220	697	901
27	472	350	330	230	210	881	1170	3260	2260	1200	700	943
28	460	390	330	220	242	860	1390	3400	1990	1100	700	989
29	460	385	310	220	---	860	1600	3460	1930	1140	702	1100
30	452	380	320	200	---	850	1880	3400	1890	1150	720	1020
31	460	---	310	185	---	840	---	3080	---	1080	710	---
TOTAL	24320	12366	11330	7430	5197	16848	35857	89000	86930	44620	22742	27241
MEAN	785	412	365	240	186	543	1195	2871	2898	1439	734	908
MAX	1060	460	400	300	242	935	1880	3530	4430	1830	1070	1100
MIN	452	350	310	185	155	220	850	2080	1890	1080	626	720
AC-FT	48240	24530	22470	14740	10310	33420	71120	176500	172400	88500	45110	54030

CAL YR 1984 TOTAL 467741 MEAN 1278 MAX 6830 MIN 220 AC-FT 927800
WTR YR 1985 TOTAL 383881 MEAN 1052 MAX 4430 MIN 155 AC-FT 761400

NOTE.--NO GAGE-HEIGHT RECORD DEC. 1 TO FEB. 27.

09118450 COCHETOPA CREEK BELOW ROCK CREEK, NEAR PARLIN, CO

LOCATION.--Lat 38°20'08", long 106°46'18", in SW¼NE¼ sec.17, T.47 N., R.2 E. Saguache County, Hydrologic Unit 14020003, on left bank 0.75 mi downstream from Rock Creek and 12 mi southeast of Parlin.

DRAINAGE AREA.--334 mi^2.

PERIOD OF RECORD.--October 1981 to Current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 3 to Apr. 10, May 11-13. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of hay meadows above station. Transmountain diversion by Tarbell ditch exports water above station to Saguache Creek, since 1913. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft^3/s, May 23, 1984, gage height, 4.49 ft; minimum daily, 8.4 ft^3/s, Feb. 7, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 332 ft^3/s at 0100 June 10, gage height, 3.18 ft; minimum daily, 27 ft^3/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	54	42	30	28	40	58	100	102	69	132	33
2	59	48	41	30	27	39	68	108	99	69	121	32
3	60	49	41	30	28	36	82	145	106	66	105	30
4	70	48	41	30	31	35	110	188	127	61	91	30
5	68	46	41	31	31	35	100	178	135	52	85	30
6	63	48	42	32	32	38	78	182	142	53	81	29
7	62	47	44	33	32	40	74	168	166	48	82	28
8	58	50	45	35	33	44	84	160	228	45	85	28
9	57	42	46	35	33	48	88	158	280	44	125	28
10	55	42	46	35	33	56	107	140	316	43	99	28
11	54	43	46	35	33	60	112	130	294	44	95	29
12	53	44	45	35	32	60	96	112	247	45	89	35
13	53	45	45	34	33	56	100	105	204	50	80	31
14	51	47	44	37	31	54	98	94	197	46	51	29
15	51	42	44	37	32	56	120	88	185	46	49	29
16	49	45	43	36	33	60	120	86	159	50	48	37
17	55	51	42	36	33	60	120	86	168	54	47	33
18	57	49	42	36	33	58	125	78	166	60	46	33
19	49	45	41	33	33	58	120	76	161	57	47	35
20	52	44	39	32	34	62	98	76	143	66	47	37
21	49	43	38	31	37	60	92	80	126	61	45	43
22	54	43	36	31	37	56	90	88	118	61	47	40
23	50	44	33	31	36	54	80	98	101	72	43	41
24	50	45	30	31	37	60	82	97	103	56	41	40
25	51	44	31	32	38	62	79	90	124	52	40	38
26	49	38	32	32	37	60	84	90	117	59	39	36
27	55	41	33	32	37	58	79	94	100	52	38	35
28	50	42	34	32	38	54	84	108	81	61	38	36
29	50	42	34	32	---	54	84	114	78	108	36	37
30	50	42	33	32	---	54	86	106	73	100	29	37
31	53	---	31	31	---	55	---	98	---	111	29	---
TOTAL	1696	1353	1225	1019	932	1622	2798	3521	4646	1861	2030	1007
MEAN	54.7	45.1	39.5	32.9	33.3	52.3	93.3	114	155	60.0	65.5	33.6
MAX	70	54	46	37	38	62	125	188	316	111	132	43
MIN	49	38	30	30	27	35	58	76	73	43	29	28
AC-FT	3360	2680	2430	2020	1850	3220	5550	6980	9220	3690	4030	2000

CAL YR 1984 TOTAL 39560 MEAN 108 MAX 954 MIN 27 AC-FT 78470
WTR YR 1985 TOTAL 23710 MEAN 65.0 MAX 316 MIN 27 AC-FT 47030

NOTE.--NO GAGE-HEIGHT RECORD DEC. 3 TO APR. 10.

09119000 TOMICHI CREEK AT GUNNISON, CO

LOCATION.--Lat 38°31'18", long 106°56'25", in NE¼SW¼ sec.11, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020003, on right bank 300 ft downstream from highway bridge, 1.8 mi southwest of Post Office in Gunnison, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--1,061 mi².

PERIOD OF RECORD.--November and December 1910 (gage heights and discharge measurements only), October 1937 to current year. Monthly discharges only for some periods, published in WSP 1313. Published as "near Gunnison" 1910.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,628.58 ft above National Geodetic Vertical Datum of 1929. Nov. 25 to Dec. 24, 1910, nonrecording gage 300 ft upstream at different datum. Apr. 20, 1938, to Oct. 2, 1940, water-stage recorder at present site at datum 1.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 7-9, 12-15, 18-21, Nov. 24 to Apr. 9, Aug. 26 to Sept. 12. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 24,000 acres above station. Water diverted above station by Larkspur ditch to Arkansas River basin since 1935 and by Tarbell ditch to Rio Grande basin since 1914. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--48 years (water years 1938-85), 175 ft³/s; 126,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,620 ft³/s, May 23, 1984, gage height, 5.49 ft; minimum daily, 2.6 ft³/s, Sept. 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,460 ft³/s at 0300 June 11, gage height, 4.27 ft; minimum daily, 60 ft³/s, Aug. 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	39	21	10	8.0	10	12	69	405	300	117	35
2	58	36	20	7.0	7.5	11	14	96	452	310	126	38
3	58	38	18	8.0	8.5	10	18	173	519	310	117	41
4	59	33	17	8.0	9.0	9.5	27	227	545	315	105	41
5	61	31	15	8.0	8.5	9.0	23	232	509	320	98	37
6	61	35	15	10	9.0	10	21	248	711	315	91	33
7	62	34	15	11	8.5	11	24	260	674	295	86	34
8	64	34	17	11	9.0	11	30	271	730	275	82	34
9	62	30	17	11	8.5	12	33	248	820	275	85	31
10	61	29	16	10	8.0	15	32	228	805	265	79	29
11	60	27	16	9.5	7.5	16	35	182	730	259	91	39
12	60	26	17	9.5	8.0	15	46	143	675	245	82	49
13	59	27	15	8.5	8.5	14	57	121	655	267	71	39
14	59	28	15	8.0	8.0	13	70	103	655	247	65	35
15	50	23	16	8.0	8.5	14	93	99	625	212	60	62
16	49	24	19	9.0	9.0	15	101	110	670	186	56	73
17	53	26	16	8.0	9.0	15	97	116	610	181	52	67
18	53	24	15	11	9.0	15	100	122	605	208	58	72
19	51	23	15	11	8.0	14	85	135	625	203	55	93
20	52	22	14	10	9.0	14	72	136	590	171	48	86
21	48	22	11	11	9.0	15	61	149	610	155	47	95
22	47	19	10	11	9.0	14	54	144	565	153	45	98
23	46	19	8.5	10	9.0	13	48	164	525	144	43	91
24	46	19	8.0	10	8.5	14	48	252	495	132	40	87
25	45	20	8.5	9.5	9.0	15	47	366	520	123	39	87
26	42	20	14	10	9.0	15	43	469	460	118	37	79
27	44	19	14	9.6	9.0	14	39	504	360	109	37	77
28	43	18	13	9.5	9.5	13	39	530	335	124	36	77
29	42	18	14	10	---	13	42	552	335	151	35	75
30	41	20	12	9.5	---	12	46	525	310	137	33	66
31	42	---	11	8.5	---	12	---	503	---	120	33	---
TOTAL	1633	783	453.0	295.1	241.0	403.5	1457	7477	17125	6625	2049	1800
MEAN	52.7	26.1	14.6	9.52	8.61	13.0	48.6	241	571	214	66.1	60.0
MAX	64	39	21	11	9.5	16	101	552	820	320	126	98
MIN	41	18	8.0	7.0	7.5	9.0	12	69	310	109	33	29
AC-FT	3240	1550	899	585	478	800	2890	14830	33970	13140	4060	3570

CAL YR 1984 TOTAL 45838.6 MEAN 125 MAX 811 MIN 6.2 AC-FT 90920
WTR YR 1985 TOTAL 40341.6 MEAN 111 MAX 820 MIN 7.0 AC-FT 80020

NOTE.--NO GAGE-HEIGHT RECORD NOV. 24 TO APR. 9.

09123400 LAKE FORK BELOW MILL GULCH, NEAR LAKE CITY, CO

LOCATION.--Lat 37°54'23", long 107°23'03", Hinsdale County, Hydrologic Unit 14020002, on left bank 2,000 ft downstream from Mill Gulch, 1,000 ft upstream from Bent Creek and 8.5 mi southwest of Lake City.

DRAINAGE AREA.--57.5 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 19-21, 26-27, 30, Dec. 1, 3, 5-7, 17, 21-25, Dec. 30 to Jan. 6, 10-17, 20, 23-26, 28, Jan. 30 to Apr. 11, June 9 to July 10. Records fair except for estimated daily discharges, which are poor. No regulation or diversions above station. Several observations of water temperature and specific conductance were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,530 ft³/s, June 9, 1985, gage height, 7.13 ft (from rating curve extended above 670 ft³/s); maximum recorded gage height, 8.47 ft, Apr. 8, 1982 (backwater from ice); minimum daily discharge, 6.5 ft³/s, Mar. 22, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 29	2200	629	6.03	June 9	0200	*1,530	*7.13

Minimum daily discharge, 7.0 ft³/s, Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	39	21	10	8.0	10	12	69	405	300	117	35
2	58	36	20	7.0	7.5	11	14	96	452	310	126	38
3	58	38	18	8.0	8.5	10	18	173	519	310	117	41
4	59	33	17	8.0	9.0	9.5	27	227	545	315	105	41
5	61	31	15	8.0	8.5	9.0	23	232	509	320	98	37
6	61	35	15	10	9.0	10	21	248	711	315	91	33
7	62	34	15	11	8.5	11	24	260	674	295	86	34
8	64	34	17	11	9.0	11	30	271	730	275	82	34
9	62	30	17	11	8.5	12	33	248	820	275	85	31
10	61	29	16	10	8.0	15	32	228	805	265	79	29
11	60	27	16	9.5	7.5	16	35	182	730	259	91	39
12	60	26	17	9.5	8.0	15	46	143	675	245	82	49
13	59	27	15	8.5	8.5	14	57	121	655	267	71	39
14	59	28	15	8.0	8.0	13	70	103	655	247	65	35
15	50	23	16	8.0	8.5	14	93	99	625	212	60	62
16	49	24	19	9.0	9.0	15	101	110	670	186	56	73
17	53	26	16	8.0	9.0	15	97	116	610	181	52	67
18	53	24	15	11	9.0	15	100	122	605	208	58	72
19	51	23	15	11	8.0	14	85	135	625	203	55	93
20	52	22	14	10	9.0	14	72	136	590	171	48	86
21	48	22	11	11	9.0	15	61	149	610	155	47	95
22	47	19	10	11	9.0	14	54	144	565	153	45	98
23	46	19	8.5	10	9.0	13	48	164	525	144	43	91
24	46	19	8.0	10	8.5	14	48	252	495	132	40	87
25	45	20	8.5	9.5	9.0	15	47	366	520	123	39	87
26	42	20	14	10	9.0	15	43	469	460	118	37	79
27	44	19	14	9.6	9.0	14	39	504	360	109	37	77
28	43	18	13	9.5	9.5	13	39	530	335	124	36	77
29	42	18	14	10	---	13	42	552	335	151	35	75
30	41	20	12	9.5	---	12	46	525	310	137	33	66
31	42	---	11	8.5	---	12	---	503	---	120	33	---
TOTAL	1633	783	453.0	295.1	241.0	403.5	1457	7477	17125	6625	2049	1800
MEAN	52.7	26.1	14.6	9.52	8.61	13.0	48.6	241	571	214	66.1	60.0
MAX	64	39	21	11	9.5	16	101	552	820	320	126	98
MIN	41	18	8.0	7.0	7.5	9.0	12	69	310	109	33	29
AC-FT	3240	1550	899	585	478	800	2890	14830	33970	13140	4060	3570

CAL YR 1984	TOTAL	45838.6	MEAN	125	MAX	811	MIN	6.2	AC-FT	90920
WTR YR 1985	TOTAL	40341.6	MEAN	111	MAX	820	MIN	7.0	AC-FT	80020

NOTE.--NO GAGE-HEIGHT RECORD FEB. 5 TO APR. 11, JUNE 9 TO JULY 10.

09124500 LAKE FORK AT GATEVIEW, CO

LOCATION.--Lat 38°17'56", long 107°13'46", in SE¼NE¼ sec.29, T.47 N., R.3 W., Gunnison County, Hydrologic Unit 14020002, on left bank at old village of Gateview, 25 ft downstream from private bridge, 0.2 mi upstream from Indian Creek, and 6.3 mi upstream from waterline of Blue Mesa Reservoir, at elevation 7,519 ft.

DRAINAGE AREA.--334 mi^2.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,827.66 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, at datum 2.00 ft, higher, and Oct. 1, 1938, to Sept. 30, 1945, at datum 1.00 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 16 to Apr. 12. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,600 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--48 years, 240 ft^3/s, 173,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,720 ft^3/s, July 10, 1983, gage height, 4.18 ft; minimum daily, 22 ft^3/s, Jan. 21, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1400 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 9	0400	*2,480	*3.95	No other peak greater than base discharge.			

Minimum daily discharge, 38 ft^3/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	132	77	61	42	63	76	300	878	863	427	121
2	116	130	71	50	38	67	88	347	833	879	419	120
3	129	127	56	52	48	63	120	506	993	883	411	124
4	140	122	63	52	50	59	175	730	1060	903	382	127
5	141	120	59	53	48	58	135	844	1170	916	349	123
6	150	125	61	57	50	67	115	898	1400	897	319	114
7	153	121	57	52	48	73	135	910	1790	844	293	111
8	152	119	58	54	52	74	170	995	2200	785	272	111
9	155	116	84	56	50	79	185	999	2350	780	271	106
10	141	103	80	54	46	105	175	920	2300	751	258	101
11	146	112	80	52	42	110	190	794	2090	740	261	99
12	158	111	72	52	46	100	213	644	1930	706	259	128
13	171	111	76	48	48	92	240	542	1870	725	237	124
14	149	114	76	46	46	86	265	455	1870	720	216	113
15	144	99	77	48	48	90	312	409	1790	665	198	119
16	144	95	74	49	52	97	370	409	1920	618	184	153
17	157	99	71	47	51	98	384	428	1750	581	172	153
18	159	86	72	51	52	99	413	441	1730	615	173	153
19	149	87	72	53	49	92	401	446	1790	633	173	192
20	149	90	74	51	52	90	327	435	1680	600	163	210
21	149	75	71	52	52	96	284	457	1740	581	161	230
22	153	73	67	52	51	86	253	442	1610	568	151	255
23	147	82	51	51	51	78	231	419	1500	535	143	261
24	146	89	47	50	49	84	225	503	1420	510	133	236
25	146	88	52	51	52	90	226	695	1490	475	130	222
26	143	82	62	52	54	92	224	875	1310	473	126	209
27	146	78	68	53	58	82	213	1040	1030	437	122	203
28	140	79	73	53	60	80	228	1150	953	421	121	196
29	142	89	70	53	---	78	238	1250	954	485	117	190
30	131	90	66	52	---	74	244	1200	891	481	114	176
31	133	---	64	45	---	74	---	1080	---	440	111	---
TOTAL	4490	3044	2101	1602	1385	2576	6855	21563	46292	20510	6866	4780
MEAN	145	101	67.8	51.7	49.5	83.1	229	696	1543	662	221	159
MAX	171	132	84	61	60	110	413	1250	2350	916	427	261
MIN	111	73	47	45	38	58	76	300	833	421	111	99
AC-FT	8910	6040	4170	3180	2750	5110	13600	42770	91820	40680	13620	9480

CAL YR 1984 TOTAL 153312 MEAN 419 MAX 2160 MIN 47 AC-FT 304100
WTR YR 1985 TOTAL 122064 MEAN 334 MAX 2350 MIN 38 AC-FT 242100

NOTE.--NO GAGE-HEIGHT RECORD DEC. 16 TO APR. 12.

09126000 CIMARRON RIVER NEAR CIMARRON, CO

LOCATION.--Lat 38°15'36", long 107°32'43", in NW¼NE¼ sec.8, T.46 N., R.6 W., Gunnison County, Hydrologic Unit 14020002, on right bank 100 ft upstream from Forest Service bridge, 0.6 mi upstream from headgate on Cimarron ditch, 2.1 mi downstream from Silver Jack Dam, and 13 mi south of Cimarron.

DRAINAGE AREA.--66.6 mi^2.

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1965, published as Cimarron Creek near Cimarron.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,631.48 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1972, at site 0.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 5-7, 22-23, 25, 30, Jan. 2-16, 23, Jan. 31 to Feb. 8, Feb. 10-24, Mar. 4-5, Mar. 23 to Apr. 12. Records good except for estimated daily discharges, which are poor. Diversion above station through Owl Creek ditch into Uncompahgre River basin. Flow regulated by Silver Jack Dam, 2.1 mi upstream since Dec. 23, 1970, total capacity, 13,520 acre-ft. Several observations of specific 2onductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years (water years 1955-70), 88.6 ft^3/s; 64,190 acre-ft/yr, prior to completion of Silver Jack Dam: 15 years (water years 1971-85), 100 ft^3/s; 72,450 acre-ft/yr, subsequent to completion of Silver Jack Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft^3/s, June 28, 1957, gage height, 8.32 ft, site and datum then in use; no flow Dec. 24, 1970, to Jan. 9, 1971 (result of storage in Silver Jack Dam); minimum daily prior to construction of Silver Jack Dam, 8.0 ft^3/s, Dec. 27, 28, 1962, Jan. 13, 1963; minimum daily, 4.4 ft^3/s, Apr. 20, 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,150 ft^3/s at 2400 June 8, gage height, 5.38 ft, minimum daily, 16 ft^3/s, Feb. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	79	30	27	24	30	32	54	465	263	138	119
2	113	29	27	22	22	29	34	64	494	274	152	123
3	114	28	27	23	27	28	35	70	552	271	143	126
4	115	28	27	23	29	27	43	86	550	276	135	126
5	114	28	25	23	27	27	39	83	611	274	135	126
6	113	28	25	25	29	28	31	82	716	266	134	126
7	113	28	25	24	27	28	31	80	864	249	135	124
8	111	28	26	26	30	28	33	80	995	227	135	64
9	111	28	26	28	29	28	39	77	996	223	135	34
10	111	27	26	27	26	32	40	82	943	204	137	33
11	111	27	26	27	24	37	39	79	829	204	137	33
12	111	27	26	25	25	33	42	222	801	195	129	33
13	112	27	26	24	26	31	49	246	768	221	123	32
14	112	27	26	24	26	31	53	201	761	196	123	32
15	111	27	26	28	26	31	59	198	752	154	121	39
16	111	27	26	30	27	29	58	209	782	149	122	34
17	111	28	26	32	28	30	59	210	774	138	122	36
18	111	27	26	30	28	30	61	221	716	152	123	39
19	110	27	26	29	27	29	54	226	697	195	122	41
20	109	30	27	28	28	29	47	223	633	216	124	43
21	109	32	26	28	28	29	44	226	623	225	130	45
22	109	27	22	28	29	28	39	221	591	250	130	47
23	107	27	20	27	28	29	37	230	492	255	130	44
24	107	27	27	28	27	30	36	299	498	225	131	42
25	107	27	29	28	20	31	35	401	549	175	130	41
26	107	27	27	28	16	31	33	470	428	159	125	41
27	107	30	27	28	30	31	36	522	310	140	122	41
28	106	27	27	29	29	30	39	597	287	130	122	43
29	106	26	27	29	---	29	40	650	292	135	122	44
30	106	26	25	29	---	29	49	633	269	134	120	42
31	106	---	27	25	---	30	---	550	---	127	118	---
TOTAL	3414	881	809	832	742	922	1266	7592	19038	6302	4005	1793
MEAN	110	29.4	26.1	26.8	26.5	29.7	42.2	245	635	203	129	59.8
MAX	115	79	30	32	30	37	61	650	996	276	152	126
MIN	106	26	20	22	16	27	31	54	269	127	118	32
AC-FT	6770	1750	1600	1650	1470	1830	2510	15060	37760	12500	7940	3560

CAL YR 1984 TOTAL 66234.5 MEAN 181 MAX 1270 MIN 8.5 AC-FT 131400
WTR YR 1985 TOTAL 47596 MEAN 130 MAX 996 MIN 16 AC-FT 94410

09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO

LOCATION.--Lat 38°31'45", long 107°38'54", in NE¼NW¼ sec.10, T.49 N., R.7 W., Montrose County, Hydrologic Unit 14020002, on left bank 0.4 mi downstream from east portal of Gunnison tunnel, 4.7 mi downstream from Crystal Creek, and 12 mi northeast of Montrose.

DRAINAGE AREA.--3,965 mi².

PERIOD OF RECORD.--October 1903 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at east portal of Gunnison tunnel" 1905-6 and as "at River portal" 1907-11.

REVISED RECORDS.--WSP 1313: 1906(M). WSP 1733: 1918-19, 1948. WSP 2124: Drainage area. WDR CO-77-2: 1926, 1941.

GAGE.--Water-stage recorder. Datum of gage is 6,526.06 ft above National Geodetic Vertical Datum of 1929. Apr. 9, 1905, to Aug. 20, 1915, nonrecording gage at site 300 ft upstream from diversion dam at east portal of Gunnison tunnel, at different datum. Aug. 21, 1915, to Jan. 19, 1943, nonrecording gage at site 500 ft downstream from diversion dam at east portal of Gunnison tunnel, at different datum. Jan. 20, 1943, to Sept. 30, 1956, water-stage recorder at present site at datum 1.0 ft, higher.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, transbasin diversion through Gunnison tunnel for irrigation of about 75,000 acres in Uncompahgre Valley (see table below for figures of diversion), Taylor Park Reservoir (station 09108500), Blue Mesa Reservoir (station 09124600), Morrow Point Reservoir (station 09125400), Crystal Reservoir (station 09127600), diversions for irrigation of about 63,000 acres, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Diversions, in acre-feet, through Gunnison tunnel; provided by Uncompahgre Valley Water Users Association.

AVERAGE DISCHARGE.--82 years, 1,394 ft³/s; 1,010,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 19,000 ft³/s, June 15, 1921, gage height, about 15.8 ft, present datum, from rating curve extended above 14,000 ft³/s; no flow Sept. 25-26, 1936, Oct. 8, 1949, Sept. 5-6, 15-16, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,130 ft³/s at 0500 June 9, gage height, 8.48 ft; minimum daily, 326 ft³/s, Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1290	1850	1880	1890	2810	3000	2580	3850	2810	1850	1610	904
2	953	1860	1880	2160	2830	3000	2630	3850	2810	1980	1600	906
3	1410	1850	1880	2360	2810	2990	2620	3850	2820	2160	1610	920
4	1420	1840	1880	2370	2800	2990	2610	3830	3120	2310	1620	920
5	1510	1850	1880	2380	2800	2980	2620	3830	3490	2310	1500	910
6	1540	1850	1870	2360	2810	2980	2600	3810	3520	2300	1280	902
7	1540	1840	1590	2490	2820	2880	2610	3710	3550	2310	1290	910
8	1540	1850	1870	2480	2840	2940	2590	3700	3980	2150	1270	899
9	1540	1840	1880	2670	2850	2930	2600	3700	5300	1820	1200	923
10	1540	1840	1880	2680	2850	2950	2580	3690	4530	1560	1190	986
11	1550	1850	1350	2670	2840	2970	2590	3690	4130	1430	1180	1060
12	1560	1840	1190	2670	2850	2910	2970	3710	4280	1430	1190	1070
13	1560	1830	1360	2670	2850	2320	3220	3510	4090	1460	1190	1080
14	1560	1830	1360	2660	2850	2830	3220	3060	4320	1460	1190	1130
15	1560	1840	1910	2630	2870	2820	3560	2750	2340	1460	1210	1140
16	1560	1840	1910	2610	2860	2800	3800	2490	2720	1440	1210	1190
17	1550	1840	1300	2660	2860	2780	3810	2470	3600	1450	1260	1250
18	1600	1840	1260	2690	2870	2790	3770	2360	2900	1470	1490	1300
19	1660	1840	1310	2700	2820	2780	3270	2310	5030	1490	1180	1340
20	1670	1840	1020	2700	2810	2770	2560	2300	4390	1500	1190	1440
21	1670	1840	883	2660	2820	2720	2560	2310	4950	1510	1050	1500
22	1680	1870	1890	2680	2870	2700	3260	2310	4870	1610	926	1460
23	1700	1870	1920	2720	2880	2710	3790	2310	4580	1800	925	1460
24	1720	1870	1920	2730	2880	2700	3830	2310	4750	1940	946	1470
25	1730	1870	1950	2800	2870	2700	3760	2310	4800	1700	963	760
26	1690	1870	979	2820	2860	2700	3670	2310	4700	1780	934	326
27	1700	1860	811	2820	2860	2660	3760	2300	4490	1510	957	1180
28	1700	1860	1240	2830	2860	2640	3810	2600	3900	1780	933	1610
29	1780	1860	1920	2830	---	2610	3790	2820	2460	1800	921	1550
30	1850	1870	1920	2820	---	2600	3820	2820	1890	1800	935	1550
31	1840	---	1910	2810	---	2580	---	2820	---	1710	948	---
TOTAL	49173	55500	49803	81020	79600	86730	94860	93690	115120	54280	36898	34046
MEAN	1586	1850	1607	2614	2843	2798	3162	3022	3837	1751	1190	1135
MAX	1850	1870	1950	2830	2880	3000	3830	3850	5300	2310	1620	1610
MIN	953	1830	811	1890	2800	2320	2560	2300	1890	1430	921	326
AC-FT	97530	110100	98780	160700	157900	172000	188200	185800	228300	107700	73190	67530
a	18,390	0	0	0	0	0	15330	25220	34390	63530	64940	48960

CAL YR 1984 TOTAL 1091526 MEAN 2982 MAX 10100 MIN 811 AC-FT 2165000
WTR YR 1985 TOTAL 830720 MEAN 2276 MAX 5300 MIN 326 AC-FT 1648000

a-DIVERSIONS, IN ACRE-FEET, THROUGH GUNNISON TUNNEL, PROVIDED BY UNCOMPAHGRE VALLEY USERS ASSOCIATION.

09128500 SMITH FORK NEAR CRAWFORD, CO

LOCATION.--Lat 38°43'40", long 107°30'22", in SW¼SE¼ sec.24, T.15 S., R.91 W., Delta County, Hydrologic Unit 14020002, on left bank 20 ft upstream from Forest Service bridge, 0.4 mi upstream from Second Creek, 6 mi northeast of Crawford, and 6.5 mi upstream from Iron Creek.

DRAINAGE AREA.--42.8 mi^2.

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1941. WDR CO-83-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,091 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 16, 1938, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Nov. 27-28, Dec. 3-6, Dec. 8 to Mar. 13, May 4-8, 14-23, July 16. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of a few small hay meadows above station. Saddle Mountain ditch diverts water above station for irrigation of about 800 acres below. One small ditch diverts water from Virginia Creek to Iron Creek drainage. Head and Ferrier ditch imports water from Curecanti Creek drainage. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--50 years, 41.0 ft^3/s; 29,700 acre-ft/yr; 51 years, 41,6 ft^3/s; 30,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft^3/s, revised, May 15, 1984, gage height, 8.28 ft, but may have been higher during period of indefinite stage-discharge relationship May 16-21, 1984; minimum daily discharge, 1.8 ft^3/s, July 30-31, Aug. 1, 1963, Sept. 5-6, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 260 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 19	2100	267	3.05	May 27	0100	*432	*3.45
May 5		Unknown	Unknown				

Minimum daily discharge, 4.1 ft^3/s, Aug. 31.

REVISIONS.--The maximum discharge for the water year 1984 has been revised to, 1,410 ft^3/s, May 15, 1984, gage height, 8.28 ft (maximum recorded), but may have been higher during period of indefinite stage-discharge relationship May 16-21. Revised daily discharges, in cubic feet per second, for high water period May 16-20, are given below. These figures supersede those published in the report for 1984.

May 16, 1984	450	May 18	800	May 20	400
17	550	19	450		

	TOTAL	MEAN	MAX	MIN	AC-FT
May 1984	12433	401	843	57	24660
Cal Yr 1983	27724.7	76.0	672	5.4	54990
Wtr Yr 1984	26739.5	73.1	843	6.0	53040

09128500 SMITH FORK NEAR CRAWFORD, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	17	11	8.2	8.0	11	67	355	240	44	9.3	4.6
2	11	17	11	8.2	7.2	12	71	379	222	42	12	7.7
3	11	18	11	8.4	7.4	12	93	416	223	39	10	10
4	16	17	10	8.4	7.6	11	108	480	218	37	9.3	8.8
5	16	16	11	8.6	7.6	11	111	510	219	33	8.4	7.8
6	16	16	11	9.0	7.8	12	113	480	224	31	8.4	6.3
7	15	16	11	9.2	7.6	14	115	490	250	29	8.2	7.0
8	15	16	11	9.2	7.8	15	117	500	275	27	8.1	7.4
9	14	15	11	9.2	7.8	17	143	459	275	26	7.9	6.6
10	13	13	11	8.8	7.6	19	140	451	259	25	7.7	7.0
11	13	13	12	8.6	8.0	22	148	402	218	25	7.7	9.3
12	15	12	11	8.0	8.2	21	166	344	190	25	7.4	17
13	16	12	11	8.0	7.8	20	186	300	172	23	7.4	13
14	18	13	10	8.0	7.8	20	199	270	167	22	7.8	12
15	17	12	10	8.0	8.0	23	221	280	163	20	11	18
16	17	12	10	8.0	8.6	29	235	270	154	20	9.1	19
17	17	12	10	8.0	8.6	36	240	270	137	25	8.8	16
18	17	12	10	8.2	8.4	41	262	280	123	20	9.2	17
19	17	12	9.6	8.4	8.4	46	264	290	113	18	8.8	18
20	17	11	10	8.4	8.6	51	217	300	108	18	8.1	17
21	16	12	9.0	8.4	8.8	63	199	270	106	16	7.7	20
22	17	12	8.2	8.2	8.8	62	173	260	97	15	7.0	21
23	16	11	8.4	8.2	8.2	55	155	310	87	18	6.4	21
24	16	11	9.0	8.2	8.2	56	154	320	82	17	5.9	19
25	17	11	9.6	8.2	8.8	77	176	337	94	15	5.8	18
26	16	11	9.8	8.2	8.8	89	173	373	72	13	5.2	18
27	17	11	9.8	8.0	8.8	80	179	394	56	12	5.2	17
28	16	11	9.6	8.2	9.2	80	216	386	50	11	4.9	27
29	16	11	9.6	8.4	---	77	260	367	47	10	4.9	32
30	17	11	9.0	8.2	---	74	295	349	46	10	4.6	26
31	17	---	8.4	8.2	---	71	---	293	---	9.5	4.1	---
TOTAL	482	394	313.0	259.2	228.4	1227	5196	11185	4687	695.5	236.3	448.5
MEAN	15.5	13.1	10.1	8.36	8.16	39.6	173	361	156	22.4	7.62	14.9
MAX	18	18	12	9.2	9.2	89	295	510	275	44	12	32
MIN	10	11	8.2	8.0	7.2	11	67	260	46	9.5	4.1	4.6
AC-FT	956	781	621	514	453	2430	10310	22190	9300	1380	469	890

CAL YR 1984 TOTAL 27209.5 MEAN 74.3 MAX 843 MIN 6.0 AC-FT 53970
WTR YR 1985 TOTAL 25351.9 MEAN 69.5 MAX 510 MIN 4.1 AC-FT 50290

09129600 SMITH FORK NEAR LAZEAR, CO

LOCATION.--Lat 38°42'27", long 107°42'35", in SE¼NE¼ sec.31, T.15 S., R.92 W., Delta County, Hydrologic Unit 14020002, on left bank 25 ft downstream from bridge, 1.8 mi upstream from Diamond Joe Gulch, and 6.4 mi southeast of Lazear.

DRAINAGE AREA.--166 mi^2.

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,830 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 5-9, Dec. 19 to March 14, March 22 to Apr. 19, May 5-20. Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by reservoirs, diversions into basin, diversions for irrigation, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 31.8 ft^3/s; 23,040 acre-ft/yr; 9 years, 35.4 ft^3/s; 25,650 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,610 ft^3/s (revised), May 18, 1984, gage height, 9.28 ft, from floodmarks; minimum daily, 0.10 ft^3/s, Aug. 12-14, 1977.

REVISIONS.--The maximum discharge for the water year 1984 has been revised to 1,610 ft^3/s, May 18, 1984, gage height, 9.28 ft. Revised daily discharges, in cubic feet per second, for April and May 1984, are given below. These figures supersede those published in the report for 1984.

April	1	10	April	9	23	April	17	94	April	25	124
	2	10		10	41		18	118		26	120
	3	10		11	38		19	122		27	108
	4	9.5		12	41		20	122		28	98
	5	8.8		13	41		21	108		29	94
	6	10		14	41		22	100		30	86
	7	17		15	41		23	100			
	8	20		16	60		24	120			
May	1	82	May	9	167	May	17	700	May	25	830
	2	86		10	227		18	1100		26	720
	3	92		11	286		19	750		27	640
	4	98		12	382		20	700		28	580
	5	120		13	536		21	640		29	540
	6	142		14	790		22	580		30	531
	7	130		15	1000		23	620		31	524
	8	132		16	600		24	740			

MONTH	TOTAL	MEAN	MAX	MIN	AC-FT
April 1984	1935.3	64.5	124	8.8	3840
May 1984	15065	486	1100	82	29880
Wtr Yr 1984	28118.3	76.8	1100	2.0	55770

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined, May 5; minimum daily, 0.46 ft^3/s, Aug. 16.

09129600 SMITH FORK NEAR LAZEAR, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	5.4	10	6.6	6.6	9.6	120	239	152	25	8.2	5.5
2	3.8	5.3	11	6.6	5.8	9.6	140	271	139	22	8.2	6.9
3	3.8	5.0	11	6.8	6.0	9.8	150	356	133	17	7.8	8.0
4	5.5	4.8	9.6	6.8	6.2	9.8	160	580	120	14	5.9	6.3
5	5.6	4.5	8.8	7.0	6.4	12	160	630	119	130	4.4	5.1
6	4.3	4.7	9.0	7.0	6.4	15	170	600	120	11	4.8	5.6
7	5.5	4.8	9.2	7.2	6.4	16	210	570	125	6.7	4.4	5.4
8	6.0	4.7	9.2	7.2	6.4	18	210	550	156	6.3	4.4	5.7
9	5.5	5.5	8.8	7.0	6.4	20	210	540	164	5.9	3.9	5.7
10	5.7	6.0	8.5	6.6	6.6	24	230	500	152	4.4	3.2	3.8
11	7.6	6.0	8.2	6.6	6.8	26	250	430	121	4.2	2.6	2.6
12	7.1	6.0	8.2	6.4	6.6	25	270	360	99	3.4	2.9	3.3
13	8.7	5.8	7.8	6.4	6.6	40	290	300	84	2.4	3.6	3.9
14	11	6.9	7.8	6.2	6.6	56	310	260	77	1.1	3.6	4.0
15	8.9	7.5	7.0	6.2	6.8	66	320	270	74	1.3	2.9	7.8
16	8.6	7.5	6.8	6.4	6.8	69	330	240	68	1.7	.46	8.7
17	8.7	14	6.8	6.4	6.8	65	330	230	64	1.6	.62	7.9
18	8.3	15	6.2	6.6	7.0	68	350	220	55	1.7	.94	7.8
19	8.4	12	6.4	6.6	7.2	69	390	230	41	2.6	1.3	7.6
20	10	12	6.6	6.6	7.2	70	374	240	42	4.2	1.1	6.8
21	9.7	13	6.4	6.6	7.2	69	331	171	41	4.4	1.4	7.7
22	11	10	6.4	6.6	7.2	70	299	175	40	6.7	2.6	7.4
23	9.4	12	6.6	6.4	7.0	74	261	172	39	11	3.2	7.0
24	8.1	11	6.8	6.2	7.0	88	241	178	40	8.8	2.2	6.3
25	8.7	13	7.0	6.2	7.2	110	221	197	48	8.2	3.2	6.4
26	7.4	12	7.2	6.4	7.6	150	212	217	48	7.4	3.2	5.9
27	7.1	15	7.4	6.6	8.2	140	196	261	46	8.2	3.9	5.9
28	10	13	7.4	6.8	9.0	130	206	257	39	11	5.1	8.1
29	8.5	13	7.2	7.0	---	120	199	241	35	11	3.6	8.5
30	7.4	10	6.6	7.0	---	110	230	216	30	11	3.7	5.8
31	5.6	---	6.5	7.0	---	110	---	184	---	8.8	4.5	---
TOTAL	230.1	265.4	242.4	206.0	192.0	1868.8	7370	9885	2511	363.0	111.82	187.4
MEAN	7.42	8.85	7.82	6.65	6.86	60.3	246	319	83.7	11.7	3.61	6.25
MAX	11	15	11	7.2	9.0	150	390	630	164	130	8.2	8.7
MIN	3.8	4.5	6.2	6.2	5.8	9.6	120	171	30	1.1	.46	2.6
AC-FT	456	526	481	409	381	3710	14620	19610	4980	720	222	372

CAL YR 1984 TOTAL 28495.6 MEAN 77.9 MAX 1100 MIN 2.0 AC-FT 56520
WTR YR 1985 TOTAL 23432.92 MEAN 64.2 MAX 630 MIN .46 AC-FT 46480

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO

LOCATION.--Lat 38°55'33", long 107°26'01", in SE¼SW¼ sec.10, T.13 S., R.90 W., Gunnison County, Hydrologic Unit 14020004, on left bank 2.3 mi east of Somerset and 4.8 mi upstream from Hubbard Creek.

DRAINAGE AREA.--526 mi².

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, October 1977 to September 1982. Sediment data available, November 1978 to September 1982.

REVISED RECORDS.--WSP 2124: Drainage area. WDR CO-77-2: 1976.

GAGE.--Water-stage recorder. Elevation of gage is 6,280 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1,1982, at various sites 0.8 mi downstream, at different datums. See WDR CO-81-2, for history of changes.

REMARKS.--Estimated daily discharges: Dec. 6-13, 24-29, Jan 1, 3-30, Feb. 1-7, and May 11-23. Records fair except those for estimated daily discharges, which are poor. Natural flow of stream affected by small diversions for irrigation in nearby drainage areas, irrigation of about 3,000 acres above station, storage in Overland Reservoir, capacity, 6,280 acre-ft, and storage in Paonia Reservoir, capacity, 18,300 acre-ft, since February 1962. See table below for contents of Paonia Reservoir.

COOPERATION.--Monthend contents, in acre-feet, in Paonia Reservoir; provided by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--52 years, 457 ft³/s; 331,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,220 ft³/s, May 24, 1984, gage height, 8.20 ft, from outside high-water mark; minimum daily, 17 ft³/s, Nov. 10, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,760 ft³/s at 0500 May 27, gage height, 6.75 ft; minimum daily, 57 ft³/s, Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	147	89	86	57	359	723	2660	2500	837	250	231
2	256	143	87	83	62	420	649	2870	2370	818	283	242
3	300	150	90	84	66	416	596	3300	2460	786	262	247
4	264	140	93	86	72	402	585	3930	2500	782	241	230
5	280	129	82	86	76	402	585	3940	2680	744	220	217
6	264	137	80	84	78	397	673	3990	2800	699	209	211
7	252	129	82	86	84	381	996	3870	3140	650	229	207
8	244	130	86	88	90	284	1190	4340	3630	608	219	208
9	241	117	90	88	91	171	1500	4460	3800	582	222	199
10	233	99	92	88	85	194	1290	4900	3520	530	222	199
11	231	109	96	84	95	260	1460	4500	2940	488	229	224
12	229	102	96	78	125	260	1790	3800	2750	481	232	273
13	239	105	98	70	137	261	2180	3300	2650	544	231	230
14	185	109	93	76	142	288	2100	2700	2650	453	228	226
15	140	95	89	74	146	284	2250	2500	2610	404	226	267
16	130	99	87	76	147	276	2380	2500	2500	362	226	278
17	134	105	85	78	141	211	2460	2500	2380	383	225	203
18	141	96	90	84	156	176	2590	2800	2330	481	225	176
19	134	88	86	84	147	177	2550	2800	2160	383	228	198
20	134	82	83	84	137	177	2210	2800	2040	467	230	189
21	137	85	84	84	137	186	2150	2900	2000	467	230	220
22	151	97	73	80	137	183	2010	3200	1760	488	233	245
23	142	95	77	76	137	160	1840	3300	1640	467	225	229
24	133	90	80	72	142	158	1830	3560	1600	418	220	247
25	131	90	80	70	149	190	1840	4150	1710	379	222	254
26	131	88	86	70	214	345	1890	4670	1450	354	229	241
27	148	74	108	68	271	622	1790	5030	1120	369	224	237
28	150	107	105	58	261	1060	1880	4560	988	303	212	410
29	145	101	100	60	---	1180	2050	4310	993	282	227	424
30	146	90	97	62	---	1120	2260	4020	900	280	231	322
31	147	---	93	60	---	1080	---	3110	---	233	236	---
TOTAL	5847	3228	2757	2407	3582	12080	50297	111270	68571	15522	7126	7284
MEAN	189	108	88.9	77.6	128	390	1677	3589	2286	501	230	243
MAX	300	150	108	88	271	1180	2590	5030	3800	837	283	424
MIN	130	74	73	58	57	158	585	2500	900	233	209	176
AC-FT	11600	6400	5470	4770	7100	23960	99760	220700	136000	30790	14130	14450
a	12400	14900	16300	9890	8320	2010	5030	18600	18300	18200	13600	10300

CAL YR 1984 TOTAL 306924 MEAN 839 MAX 7080 MIN 28 AC-FT 608800
WTR YR 1985 TOTAL 289971 MEAN 794 MAX 5030 MIN 57 AC-FT 575200

09135900 LEROUX CREEK AT HOTCHKISS, CO

LOCATION.--Lat 38°47'53", long 107°43'53", in NW¼NE¼ sec.36, T.14 S., R.9 3 W., Delta County, Hydrologic Unit 14020004, on left bank at upstream side of culvert, 0.3 mi west of Hotchkiss city limits, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--66.7 mi².

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,315 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharge: Jan. 24, 25. Records fair. Natural flow of stream is affected by diversions above station for irrigation and by return flow from irrigated area above station. Mostly return flow after June. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years, 34.4 ft³/s; 24,920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft³/s, June 7, 1984, gage height, 11.82 ft; minimum daily, 0.55 ft³/s, July 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 703 ft³/s at 2100 May 4, gage height, 7.26 ft; minimum daily, 3.4 ft³/s, July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	26	23	20	14	12	10	197	118	6.9	5.9	4.5
2	15	26	22	14	16	13	11	208	127	6.1	5.9	4.8
3	20	36	22	21	16	13	18	345	161	5.5	6.2	4.8
4	38	32	22	24	16	13	33	485	116	5.3	6.4	4.8
5	32	33	20	26	15	14	22	515	96	5.3	6.2	4.8
6	26	37	21	28	15	13	24	422	119	5.3	6.2	4.8
7	32	35	24	28	14	12	37	406	151	5.0	6.6	5.1
8	32	32	25	27	15	12	59	416	202	4.6	6.3	5.1
9	29	31	26	22	15	11	78	338	212	4.1	6.2	5.1
10	26	31	24	19	15	19	101	347	183	4.1	5.6	5.1
11	26	33	25	19	14	21	130	302	124	4.1	6.6	5.6
12	43	32	25	18	14	19	149	173	85	4.7	7.5	5.6
13	55	32	23	20	14	16	173	129	64	5.0	7.5	5.4
14	62	28	23	21	13	16	204	92	58	4.8	7.1	5.4
15	28	28	23	18	14	17	252	79	50	4.5	6.7	7.1
16	23	28	23	20	16	17	262	103	40	3.8	6.6	16
17	22	26	22	20	16	16	293	97	31	3.4	7.1	12
18	22	25	21	20	16	14	296	126	25	4.2	7.5	8.0
19	21	25	21	20	15	14	268	149	23	5.6	6.5	8.3
20	23	26	22	20	15	17	146	151	20	5.5	5.4	8.3
21	32	28	23	20	15	20	118	129	18	6.2	5.4	9.6
22	31	28	21	20	14	17	100	114	16	9.1	5.9	15
23	32	26	20	18	13	13	82	200	15	6.6	6.1	14
24	30	25	21	17	14	13	73	284	14	5.9	6.0	14
25	29	26	21	17	14	18	85	283	12	5.9	6.2	13
26	30	26	25	17	13	21	57	346	11	7.1	6.2	12
27	30	21	26	21	14	14	81	403	10	6.5	6.0	14
28	27	25	25	21	14	13	129	383	9.7	5.6	5.9	54
29	27	26	24	20	---	14	165	335	8.9	5.8	5.6	73
30	25	23	23	21	---	14	199	277	8.0	6.2	5.4	52
31	26	---	23	16	---	11	---	196	---	6.1	4.8	---
TOTAL	907	856	709	633	409	467	3655	8030	2127.6	168.8	193.5	401.2
MEAN	29.3	28.5	22.9	20.4	14.6	15.1	122	259	70.9	5.45	6.24	13.4
MAX	62	37	26	28	16	21	296	515	212	9.1	7.5	73
MIN	13	21	20	14	13	11	10	79	8.0	3.4	4.8	4.5
AC-FT	1800	1700	1410	1260	811	926	7250	15930	4220	335	384	796

CAL YR 1984 TOTAL 21547.9 MEAN 58.9 MAX 1110 MIN 3.1 AC-FT 42740
WTR YR 1985 TOTAL 18557.1 MEAN 50.8 MAX 515 MIN 3.4 AC-FT 36810

09136200 GUNNISON RIVER NEAR LAZEAR, CO

LOCATION.--Lat 38°46'59", long 107°50'14", in NE¼NE¼ sec.1, T.15 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank 300 ft downstream from North Fork Gunnison River and 3.0 mi west of Lazear.

DRAINAGE AREA.--5,241 mi².

PERIOD OF RECORD.--May 1962 to September 1985 (discontinued).

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,090 ft, from topographic map.

REMARKS.--No estimated daily discharges . Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power development, and diversions for irrigation of about 150,000 acres, part of which is in the Uncompahgre River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 2,300 ft³/s; 1,666,000 acre-ft/yr, since completion of Crystal Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,800 ft³/s, June 7, 1984, gage height, 8.57 ft, from maximum stage indicator; minimum daily, 115 ft³/s, Oct. 6, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,500 ft³/s at 0100 May 5, gage height, 6.30 ft; minimum daily, 781 ft³/s, Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1500	2260	2140	2000	2860	3190	3010	7920	6350	2630	1650	931
2	1210	2250	2120	2130	2890	3290	3160	8250	6050	2620	1650	948
3	1830	2250	2080	2450	3000	3280	3340	9290	6140	2770	1680	964
4	1960	2220	2100	2500	2990	3280	3570	10300	6170	2920	1630	978
5	2050	2210	2070	2530	2970	3250	3420	10400	6620	2900	1570	946
6	2140	2220	2060	2520	2960	3270	3630	10100	6770	2810	1290	944
7	2070	2180	1760	2640	2960	3200	3830	9980	6980	2740	1280	970
8	2040	2180	2080	2800	2980	3230	4100	10200	7500	2610	1280	976
9	2020	2180	2160	2880	3000	3020	4520	10000	9190	2280	1190	976
10	2020	2180	2140	2870	2990	3110	4640	10300	8650	1990	1170	1000
11	2020	2180	1560	2870	2970	3290	4810	10100	7410	1800	1160	1080
12	2090	2140	1370	2850	3000	3310	5440	8850	7120	1760	1180	1170
13	2170	2120	1620	2830	3010	2690	6350	8140	6960	1810	1170	1170
14	2250	2120	1570	2810	3000	3150	6490	7050	6810	1770	1170	1200
15	2120	2140	2050	2780	2990	3020	7250	6620	6040	1710	1180	1340
16	2060	2160	2100	2750	2980	2970	8070	6440	5120	1660	1190	1430
17	2050	2180	1610	2850	2990	3010	8030	6640	5660	1650	1150	1390
18	2110	2160	1510	2870	3050	3030	7980	6780	5010	1680	1500	1380
19	2220	2160	1550	3010	3050	3070	7810	6820	6810	1720	1130	1430
20	2200	2120	1520	3030	3030	3060	5930	6630	6170	1730	1120	1520
21	2190	2120	811	3160	3060	3090	5830	6450	6520	1740	1080	1690
22	2180	2160	1980	3140	3120	3050	5900	6470	6340	1880	933	1680
23	2220	2180	1990	3210	3080	2990	6340	6700	5900	2040	934	1710
24	2250	2180	2010	3210	3050	2980	6350	7140	5910	2190	944	1660
25	2240	2200	2040	3250	3050	3090	6610	7270	6160	1910	947	1480
26	2110	2180	1570	3320	3030	3230	6560	7530	5910	1990	937	781
27	2140	2070	808	3320	3130	3410	6500	7720	5440	1750	935	1090
28	2140	2100	1540	3300	3170	3680	6900	7650	4640	1900	936	1970
29	2190	2160	2040	3320	---	3850	7190	7670	3750	1900	912	2200
30	2280	2160	2070	3300	---	3570	7440	7410	2790	1880	914	1970
31	2260	---	2050	2970	---	3000	---	6880	---	1810	922	---
TOTAL	64330	65120	56079	89470	84360	98660	171000	249700	186890	64550	36734	38974
MEAN	2075	2171	1809	2886	3013	3183	5700	8055	6230	2082	1185	1299
MAX	2280	2260	2160	3320	3170	3850	8070	10400	9190	2920	1680	2200
MIN	1210	2070	808	2000	2860	2690	3010	6440	2790	1650	912	781

CAL YR 1984 TOTAL 1464799 MEAN 4002 MAX 17200 MIN 808
WTR YR 1985 TOTAL 1205867 MEAN 3304 MAX 10400 MIN 781

09137050 CURRANT CREEK NEAR READ, CO

LOCATION.--Lat 38°47'05", long 107°56'18", in SW¼SE¼ sec.31, T.14 S., R.94 W., Delta County, Hydrologic Unit 14020005, on right bank 0.2 mi downstream from Dry Creek, 0.4 mi upstream from mouth, 0.7 mi northeast of Austin, and 2.4 mi northeast of Read.

DRAINAGE AREA.--56.9 mi^2.

PERIOD OF RECORD.--May 1976 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,035 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Aug. 24 to Sept. 11. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years, 12.9 ft^3/s; 9,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 644 ft^3/s, June 7, 1984, gage height, 5.73 ft, no flow, Aug. 2, 4, 5, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 331 ft^3/s at 2400 May 4, gage height, 4.99 ft, minimum daily, 0.45 ft^3/s, July 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	13	12	9.5	12	20	183	53	1.4	3.6	2.2
2	12	12	13	11	9.6	12	23	145	39	.86	3.5	2.3
3	11	12	12	14	9.7	12	31	174	26	.71	3.4	2.4
4	16	11	13	13	9.7	11	45	203	18	.67	3.2	2.4
5	13	11	12	13	9.7	11	35	198	13	.53	4.3	2.3
6	10	11	13	12	9.7	12	33	145	11	.45	3.9	2.4
7	9.4	11	13	12	9.7	12	38	139	8.5	.52	3.2	3.0
8	9.2	11	13	14	10	12	48	154	12	.54	3.2	3.8
9	9.4	11	14	14	12	12	51	115	13	.61	3.0	3.3
10	9.2	11	14	13	12	16	55	102	9.7	.65	3.1	3.1
11	9.2	11	15	13	12	20	107	85	4.5	.77	3.0	4.3
12	11	11	15	12	12	21	116	62	2.7	.80	2.5	6.0
13	12	11	15	11	11	17	142	59	1.8	.87	2.3	4.3
14	12	11	14	11	11	14	147	46	2.2	.94	2.4	5.0
15	11	10	14	11	12	15	160	42	2.3	.86	2.1	12
16	11	11	14	11	13	17	155	52	2.1	.91	1.9	10
17	11	12	14	11	14	19	136	46	1.7	.89	2.0	8.0
18	12	12	13	12	15	20	127	52	2.0	1.2	1.8	11
19	11	11	14	11	16	21	125	58	1.9	1.6	1.8	13
20	11	11	14	12	16	21	71	74	4.0	1.3	2.0	13
21	11	10	13	12	17	22	77	41	2.0	1.0	1.9	13
22	11	11	12	12	17	20	68	27	1.7	1.2	1.9	13
23	12	11	12	12	13	17	46	20	2.7	1.5	1.9	12
24	12	11	13	12	12	18	55	33	3.3	2.6	2.0	11
25	11	12	11	11	12	23	75	66	5.0	4.0	1.9	11
26	11	11	12	12	12	29	62	72	6.8	4.0	1.8	9.9
27	12	10	18	12	11	22	67	73	6.9	3.5	1.8	11
28	12	11	20	12	12	20	152	62	4.6	3.6	1.9	16
29	13	11	16	12	---	21	182	61	2.8	4.3	2.1	26
30	13	12	14	12	---	18	168	54	1.5	3.5	2.1	23
31	13	---	14	9.4	---	19	---	52	---	5.1	2.2	---
TOTAL	355.4	334	427	371.4	339.6	536	2617	2695	265.7	51.38	77.7	259.7
MEAN	11.5	11.1	13.8	12.0	12.1	17.3	87.2	86.9	8.86	1.66	2.51	8.66
MAX	16	12	20	14	17	29	182	203	53	5.1	4.3	26
MIN	9.2	10	11	9.4	9.5	11	20	20	1.5	.45	1.8	2.2
AC-FT	705	662	847	737	674	1060	5190	5350	527	102	154	515

CAL YR 1984 TOTAL 8278.92 MEAN 22.6 MAX 338 MIN .19 AC-FT 16420
WTR YR 1985 TOTAL 8329.88 MEAN 22.8 MAX 203 MIN .45 AC-FT 16520

09143000 SURFACE CREEK NEAR CEDAREDGE, CO

LOCATION.--Lat 38°59'05", long 107°51'13", in NW¼NW¼ sec.25, T.12 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank 5 ft downstream from private bridge, 1.4 mi downstream from Caesar Creek, and 7.0 mi northeast of Cedaredge.

DRAINAGE AREA.--27.4 mi^2.

PERIOD OF RECORD.--July 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WDR CO-83-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,261 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 25-26, 28, Nov. 2-5, 9-10, 12, 15-16, 18-23, Nov. 25 to Dec. 3, Dec. 18 to Mar. 5, Mar. 13-14, 17, 22-23, 25, 28-30. Records good except for estimated daily discharges, which are poor. Flow regulated by many small reservoirs. Some water imported from Leon Lake in Plateau Creek drainage. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--46 years, 42.7 ft^3/s; 30,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 824 ft^3/s, June 7, 1984, gage height, 3.67 ft, from rating curve extended above 310 ft^3/s; maximum gage height, 5.10 ft, Apr. 13, 1958 (ice jam); minimum daily discharge, 0.80 ft^3/s, Jan. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 329 ft^3/s at 2200 May 27, gage height, 2.65 ft; minimum daily, 4.1 ft^3/s, Feb. 24, 26-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	6.0	6.4	5.0	4.6	5.0	5.8	119	224	108	89	59
2	20	5.8	6.4	4.4	4.7	5.8	6.3	138	217	108	89	61
3	9.7	5.6	6.8	5.4	4.8	5.6	9.6	162	226	103	79	51
4	20	5.4	5.8	5.6	5.0	5.4	10	197	220	108	76	49
5	18	5.5	5.8	5.6	5.2	6.2	9.1	175	220	108	74	66
6	10	5.6	6.0	5.6	5.3	5.5	9.7	174	238	106	79	69
7	7.9	5.5	6.0	5.6	5.6	5.0	13	212	245	104	77	59
8	7.0	4.7	6.3	6.0	5.7	5.0	17	231	248	99	83	57
9	6.5	5.6	6.0	5.8	5.3	5.0	21	205	257	112	80	56
10	7.3	5.4	5.0	5.8	4.9	5.8	28	224	252	110	97	52
11	8.2	5.8	5.3	5.6	4.9	6.0	41	194	230	110	97	56
12	13	5.6	5.3	5.4	4.9	5.5	58	160	213	110	94	58
13	16	5.7	5.8	5.2	4.8	5.9	76	136	207	92	94	51
14	18	5.5	5.3	5.6	4.8	5.7	91	117	198	88	94	40
15	11	5.3	5.2	5.4	4.8	5.5	106	130	195	83	94	61
16	12	5.5	5.0	5.8	5.0	5.0	116	140	184	71	92	49
17	8.9	5.8	5.2	5.6	5.0	5.0	116	142	177	70	71	42
18	10	5.6	5.2	5.6	5.1	5.2	127	156	175	76	70	48
19	8.2	5.5	5.4	5.4	4.8	5.2	108	168	171	73	69	61
20	7.3	5.5	5.6	5.2	4.4	5.2	77	177	167	76	70	49
21	7.0	5.5	5.4	5.2	4.4	5.5	62	177	153	80	69	31
22	7.0	5.5	5.0	5.4	4.2	5.8	53	177	150	74	73	29
23	7.3	5.5	5.1	5.0	4.2	6.3	47	203	140	74	71	26
24	7.3	5.7	5.3	5.1	4.1	6.1	43	224	140	69	71	13
25	6.8	5.9	5.3	5.1	4.5	6.5	45	241	148	77	70	11
26	7.0	5.7	5.6	5.0	4.1	7.0	39	255	145	77	71	8.6
27	7.0	4.8	6.8	5.0	4.1	6.5	42	277	130	62	88	6.5
28	6.8	5.6	6.6	5.1	4.5	6.8	66	294	117	57	88	27
29	6.5	6.0	5.6	5.3	---	6.3	83	274	114	57	71	18
30	6.5	6.4	5.4	5.0	---	6.3	106	260	112	77	67	10
31	6.3	---	5.4	4.5	---	6.1	---	245	---	77	58	---
TOTAL	312.5	167.5	175.3	165.3	133.7	177.7	1631.5	5984	5613	2696	2465	1274.1
MEAN	10.1	5.58	5.65	5.33	4.77	5.73	54.4	193	187	87.0	79.5	42.5
MAX	20	6.4	6.8	6.0	5.7	7.0	127	294	257	112	97	69
MIN	6.3	4.7	5.0	4.4	4.1	5.0	5.8	117	112	57	58	6.5
AC-FT	620	332	348	328	265	352	3240	11870	11130	5350	4890	2530

CAL YR 1984 TOTAL 21853.7 MEAN 59.7 MAX 444 MIN 4.7 AC-FT 43350
WTR YR 1985 TOTAL 20795.6 MEAN 57.0 MAX 294 MIN 4.1 AC-FT 41250

09143500 SURFACE CREEK AT CEDAREDGE, CO

LOCATION.--Lat 38°54'06", long 107°55'14", in SW¼SE¼ sec.20, T.13 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank at Cedaredge, 700 ft east of State Highway 65, and 8.5 mi upstream from mouth.

DRAINAGE AREA.--39.0 mi^2.

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WDR-CO-83-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,220 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 8, 1917, nonrecording gage at present site at datum 0.50 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 11, 14, 16-17, 22-25, Nov. 27 to Mar. 5. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions to and from nearby streams, many small storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--69 years, 28.1 ft^3/s; 20,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft^3/s, May 13, 1941, gage height, 2.50 ft, from rating curve extended above 640 ft^3/s; no flow, Sept. 25, 1939, and practically no flow at times in some winters.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 383 ft^3/s at 1900 May 7, gage height, 2.65 ft; minimum daily, 3.0 ft^3/s, Jan. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	8.9	6.4	5.4	3.2	4.6	8.5	135	166	58	26	17
2	21	8.1	6.4	4.8	3.6	5.4	9.8	150	155	56	23	19
3	13	8.5	6.8	5.8	3.8	5.2	16	184	163	51	19	18
4	20	6.9	5.8	6.0	4.2	5.0	21	236	142	59	16	17
5	22	5.8	5.8	6.0	4.4	5.8	17	218	135	61	16	24
6	15	6.6	6.0	6.0	4.8	5.0	20	197	158	61	22	30
7	11	6.4	6.0	6.0	5.0	5.0	27	256	168	62	23	30
8	9.4	6.4	6.4	6.4	5.4	5.0	32	263	180	61	30	29
9	8.5	5.5	6.0	5.6	5.0	4.4	36	212	185	51	31	26
10	8.1	4.4	5.0	5.2	4.7	6.6	41	230	173	48	42	25
11	8.9	5.4	5.4	5.4	4.7	7.2	46	201	150	48	46	27
12	12	5.2	5.4	5.0	4.7	6.6	62	140	133	44	45	31
13	15	5.2	6.0	5.0	4.5	5.8	95	114	117	40	40	24
14	18	5.0	5.4	4.6	4.5	5.5	111	93	105	36	38	23
15	12	4.2	5.4	4.2	4.5	6.6	133	97	99	34	39	39
16	11	4.3	5.2	4.2	4.8	7.2	130	109	88	32	38	32
17	8.9	4.4	5.4	4.4	4.8	8.1	127	113	76	29	32	20
18	9.4	4.4	5.4	4.0	5.0	8.1	135	123	72	35	31	20
19	9.4	3.9	5.6	4.0	4.5	8.1	115	133	73	33	31	36
20	8.9	4.1	5.8	3.6	4.0	8.1	69	140	69	36	28	24
21	8.9	4.7	5.6	3.6	4.0	8.5	59	152	64	41	26	26
22	8.9	4.5	5.2	3.8	3.7	7.2	49	142	61	38	26	26
23	9.4	4.5	5.4	3.4	3.7	6.4	43	168	64	36	29	26
24	9.3	4.5	5.6	3.5	3.5	7.6	43	196	62	31	19	15
25	8.1	4.5	5.6	3.5	4.0	11	45	197	69	39	15	12
26	8.1	4.7	6.0	3.4	3.5	12	38	222	66	39	14	9.8
27	10	4.5	7.2	3.4	3.5	9.4	45	250	53	32	16	8.9
28	9.4	5.8	7.0	3.5	4.0	8.1	78	254	49	27	13	18
29	8.9	6.0	6.0	3.8	---	8.5	101	239	62	24	16	20
30	8.9	6.4	5.8	3.5	---	8.1	121	227	61	30	18	11
31	8.9	---	5.8	3.0	---	8.9	---	192	---	26	15	---
TOTAL	354.3	163.7	180.8	140.0	120.0	219.0	1873.3	5583	3218	1298	823	683.7
MEAN	11.4	5.46	5.83	4.52	4.29	7.06	62.4	180	107	41.9	26.5	22.8
MAX	22	8.9	7.2	6.4	5.4	12	135	263	185	62	46	39
MIN	8.1	3.9	5.0	3.0	3.2	4.4	8.5	93	49	24	13	8.9
AC-FT	703	325	359	278	238	434	3720	11070	6380	2570	1630	1360

CAL YR 1984 TOTAL 18118.9 MEAN 49.5 MAX 520 MIN 3.0 AC-FT 35940
WTR YR 1985 TOTAL 14656.8 MEAN 40.2 MAX 263 MIN 3.0 AC-FT 29070

09144200 TONGUE CREEK AT CORY, CO

LOCATION.--Lat 38°47'16", long 107°59'41", in SE¼SE¼ sec.34, T.14 S., R.95 W., Delta County, Hydrologic Unit 14020005, on left bank at downstream side of bridge, 500 ft upstream from North Delta canal headgate, 0.5 mi west of Cory, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--197 mi².

PERIOD OF RECORD.--October 1957 to September 1968, May 1976 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,030 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Feb. 1-4. Records fair. Natural flow of stream affected by many small storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Diversions to and from nearby streams. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years (water years 1958-68, 1977-85), 41.8 ft³/s; 30,280 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,130 ft³/s, June 7, 1984, gage height, 6.77 ft, from maximum stage indicator; minimum daily, 0.35 ft³/s, July 22, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 590 ft³/s at 0200 May 28, gage height, 3.47 ft; minimum daily, 20 ft³/s, Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	60	51	47	44	42	76	428	311	27	35	25
2	66	58	48	41	45	42	87	393	275	25	36	26
3	63	57	47	50	47	40	252	379	265	23	32	27
4	85	56	46	52	49	38	142	407	230	24	29	27
5	80	56	45	52	52	39	69	400	208	24	25	26
6	69	57	46	52	53	42	69	335	216	22	23	27
7	66	57	47	52	56	42	91	407	224	22	22	33
8	65	56	48	55	56	41	131	451	245	24	22	41
9	66	57	51	53	52	44	208	390	262	25	22	36
10	66	54	50	53	49	98	292	371	240	26	22	34
11	67	56	53	52	48	96	317	358	196	26	22	40
12	84	55	52	51	49	74	347	288	170	27	24	48
13	83	53	51	49	48	46	356	245	145	28	24	38
14	90	53	50	54	48	39	376	206	118	26	23	36
15	84	51	51	52	48	46	418	195	105	28	23	67
16	78	52	50	57	50	59	390	202	102	28	22	65
17	77	54	49	55	50	72	386	198	92	27	21	54
18	75	52	49	55	51	69	379	216	79	27	20	58
19	76	51	50	53	47	64	347	240	66	27	21	84
20	75	51	51	51	44	62	275	261	57	28	21	69
21	72	51	49	51	44	76	292	275	47	33	22	76
22	69	51	46	53	42	57	260	282	40	35	22	76
23	69	51	47	50	41	40	248	271	36	39	22	77
24	66	52	49	51	40	42	268	302	34	37	23	71
25	62	53	49	51	43	85	302	322	40	38	22	68
26	64	51	52	50	40	128	255	359	41	34	21	69
27	66	43	65	50	40	76	292	407	33	36	21	65
28	63	50	63	50	42	64	372	474	29	34	22	81
29	62	52	54	51	---	69	396	459	28	34	24	96
30	62	52	52	49	---	59	407	400	27	40	24	84
31	61	---	52	44	---	64	---	365	---	36	25	---
TOTAL	2186	1602	1563	1586	1318	1855	8100	10286	3961	910	737	1624
MEAN	70.5	53.4	50.4	51.2	47.1	59.8	270	332	132	29.4	23.8	54.1
MAX	90	60	65	57	56	128	418	474	311	40	36	96
MIN	55	43	45	41	40	38	69	195	27	22	20	25
AC-FT	4340	3180	3100	3150	2610	3680	16070	20400	7860	1800	1460	3220

CAL YR 1984	TOTAL	35791	MEAN	97.8	MAX	1030	MIN	15	AC-FT	70990
WTR YR 1985	TOTAL	35728	MEAN	97.9	MAX	474	MIN	20	AC-FT	70870

09144250 GUNNISON RIVER AT DELTA, CO

LOCATION.--Lat 38°45'01", long 108°04'06", in SE¼NE¼ sec.13, T.15 S., R.96 W., Delta County, Hydrologic Unit 14020005, on left bank near upstream side of U.S. Highway 50 bridge at north edge of Delta.

DRAINAGE AREA.--5,628 mi^2.

PERIOD OF RECORD.--May 1976 to current year. Gage-height records collected at this site 1912-77 (flood seasons only) are in reports of the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 4,919.97 ft, National Weather Service Datum (levels by National Weather Service). Prior to May 1976 nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Oct. 12-19, Oct. 26 - Nov. 8, 13-26, Dec. 1-3, Jan. 29, 30, Feb. 12, 19, 20, Mar. 1-5. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, and many diversions for irrigation. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years, 2,441 ft^3/s; 1,769,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,500 ft^3/s, June 7, 1984, gage height, 13.15 ft; minimum daily, 208 ft^3/s, Aug. 11, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height observed, 13.5 ft, June 6, 1957, from National Weather Service wire-weight gage at present datum, (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,900 ft^3/s at 0600 May 5, gage-height, 9.35 ft; minimum daily, 1,090 ft^3/s, Dec. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2150	2980	2770	2650	3230	3700	3590	9100	7510	3590	2160	1320
2	1740	2970	2750	2590	3250	3700	3710	9100	6950	3580	2150	1340
3	2390	2970	2710	2970	3340	3680	4020	9900	6860	3410	2190	1380
4	2660	2940	2720	2980	3330	3650	4390	10700	6880	3580	2130	1380
5	2750	2930	2680	3060	3280	3650	4140	11000	7030	3590	2090	1360
6	2870	2940	2640	3120	3310	3610	4420	10400	7420	3500	1680	1350
7	2750	2900	2540	3230	3270	3560	4740	10300	7610	3450	1650	1400
8	2700	2900	2450	3410	3350	3610	5160	10600	7390	3380	1670	1450
9	2690	2930	2750	3420	3380	3390	5690	10800	8470	3030	1560	1460
10	2680	2890	2760	3390	3390	3520	5830	10600	10100	2730	1520	1460
11	2680	2900	2530	3380	3350	3770	6040	10600	9990	2440	1520	1570
12	2750	2880	2060	3350	3350	3810	6600	9400	8680	2400	1540	1700
13	2830	2860	2040	3290	3330	3270	7450	8550	7920	2410	1540	1710
14	2910	2860	2030	3290	3350	3490	7690	7610	7840	2440	1520	1710
15	2780	2880	2360	3280	3360	3440	8180	7030	7000	2330	1550	1980
16	2720	2900	2700	3240	3390	3400	8710	6850	6080	2240	1540	2140
17	2710	2920	2370	3300	3400	3470	8850	7050	6620	2220	1500	2040
18	2770	2900	1980	3330	3420	3530	8880	7190	5970	2340	1950	1980
19	2880	2900	2020	3500	3420	3610	9120	7230	7770	2360	1500	2090
20	2920	2860	1980	3440	3410	3600	7060	7040	7130	2420	1500	2140
21	2890	2860	1090	3580	3410	3660	6910	6860	7480	2450	1490	2370
22	2890	2900	2250	3560	3470	3600	6890	6880	7300	2720	1280	2360
23	2890	2920	2570	3600	3430	3520	7250	7110	6860	2870	1280	2360
24	2950	2920	2580	3590	3410	3530	7210	7550	6870	2920	1290	2260
25	2960	2940	2600	3620	3450	3640	7540	7680	7120	2640	1290	2190
26	2830	2920	2320	3700	3450	3860	7450	7940	6870	2660	1290	1230
27	2860	2670	1120	3690	3540	4050	7300	8130	6400	2510	1270	1300
28	2860	2670	2170	3680	3610	4460	7840	8060	5600	2670	1300	2520
29	2910	2770	2590	3650	---	4790	8190	8080	4710	2710	1280	2920
30	3000	2790	2840	3630	---	4420	8380	8350	3750	2480	1290	2590
31	2980	---	2760	3310	---	3590	---	7930	---	2440	1310	---
TOTAL	85350	86570	73730	103830	94680	114580	199230	265620	214680	86510	48830	55060
MEAN	2753	2886	2378	3349	3381	3696	6641	8568	7156	2791	1575	1835
MAX	3000	2980	2840	3700	3610	4790	9120	11000	10100	3590	2190	2920
MIN	1740	2670	1090	2590	3230	3270	3590	6850	3750	2220	1270	1230
AC-FT	169300	171700	146200	205900	187800	227300	395200	526900	425800	171600	96850	109200

CAL YR 1984 TOTAL 1766600 MEAN 4827 MAX 20300 MIN 1090 AC-FT 3504000
WTR YR 1985 TOTAL 1428670 MEAN 3914 MAX 11000 MIN 1090 AC-FT 2834000

09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, CO

LOCATION.--Lat 38°11'02", long 107°44'43", in SW¼NE¼ sec.4, T.45 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 15 ft downstream from bridge, 0.2 mi downstream from Dry Creek, 0.5 mi upstream from Dallas Creek, and 2.3 mi north of Ridgway.

DRAINAGE AREA.--149 mi².

PERIOD OF RECORD.--October 1958 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,877.58 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Dec. 23-25, Jan. 3-5, 14-18, Feb. 1-8, 11, 12. Records good except for estimated daily discharges, which are fair. Diversions for irrigation above station. Water is imported above station in some years by Red Mountain ditch from Mineral Creek in San Juan River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 166 ft³/s; 120,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s, June 24, 1983, gage height, 5.73 ft; from rating curve extended above 1,800 ft³/s; minimum daily, 26 ft³/s, Jan. 13, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 10	0100	*1,760	*5.17	June 25	0500	1,150	4.42
June 16	0100	1,450	4.85				

Minimum daily discharge, 36 ft³/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	124	72	60	40	54	65	251	484	478	279	107
2	149	124	72	48	36	57	78	278	494	509	276	112
3	143	124	70	50	46	54	113	372	578	534	276	116
4	187	116	70	50	48	50	166	480	546	555	253	118
5	239	108	68	50	46	48	117	490	648	545	237	120
6	187	108	68	54	48	59	107	470	785	530	217	120
7	169	105	68	52	46	64	124	454	1020	507	207	118
8	163	103	70	54	50	64	153	505	1360	479	202	120
9	150	101	70	56	47	70	172	486	1520	498	195	108
10	147	98	70	55	43	94	161	498	1430	478	193	96
11	139	99	71	54	40	103	185	404	1220	455	193	98
12	143	99	71	54	44	92	200	337	1160	419	183	116
13	158	99	72	49	46	80	233	319	1100	457	169	96
14	174	99	70	48	44	77	252	295	1080	446	161	92
15	158	88	70	48	46	81	284	309	1140	399	161	125
16	150	91	67	48	50	88	303	315	1150	355	152	126
17	165	96	64	46	49	89	288	303	968	354	145	105
18	161	94	65	50	49	91	303	303	978	393	154	108
19	152	89	65	50	47	83	282	331	1030	449	154	173
20	150	81	67	50	50	81	223	343	922	423	143	140
21	145	78	63	51	50	88	200	313	949	375	150	213
22	147	80	60	51	49	78	186	294	897	405	139	205
23	147	81	44	50	49	70	174	303	784	414	128	188
24	143	83	40	49	46	74	167	376	759	402	120	159
25	139	83	44	49	49	83	174	456	1010	351	114	136
26	143	80	55	50	50	83	186	501	690	340	112	128
27	143	70	63	51	49	72	174	608	510	304	112	128
28	132	75	68	51	51	70	188	649	494	312	110	136
29	130	77	65	51	---	68	188	699	515	333	108	150
30	132	71	61	49	---	64	200	661	475	304	101	127
31	126	---	61	42	---	64	---	596	---	282	103	---
TOTAL	4731	2824	2004	1570	1308	2293	5646	12999	26696	13085	5247	3884
MEAN	153	94.1	64.6	50.6	46.7	74.0	188	419	890	422	169	129
MAX	239	124	72	60	51	103	303	699	1520	555	279	213
MIN	120	70	40	42	36	48	65	251	475	282	101	92
AC-FT	9380	5600	3970	3110	2590	4550	11200	25780	52950	25950	10410	7700

CAL YR 1984 TOTAL 101711 MEAN 278 MAX 1630 MIN 40 AC-FT 201700
WTR YR 1985 TOTAL 82287 MEAN 225 MAX 1520 MIN 36 AC-FT 163200

09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, CO

LOCATION.--Lat 38°11'02", long 107°44'43", in SW¼NE¼ sec.4, T.45 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 15 ft downstream from bridge, 0.2 mi downstream from Dry Creek, 0.5 mi upstream from Dallas Creek, and 2.3 mi north of Ridgway.

DRAINAGE AREA.--149 mi².

PERIOD OF RECORD.--October 1958 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,877.58 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Dec. 23-25, Jan. 3-5, 14-18, Feb. 1-8, 11, 12. Records good except for estimated daily discharges, which are fair. Diversions for irrigation above station. Water is imported above station in some years by Red Mountain ditch from Mineral Creek in San Juan River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 166 ft³/s; 120,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s, June 24, 1983, gage height, 5.73 ft; from rating curve extended above 1,800 ft³/s; minimum daily, 26 ft³/s, Jan. 13, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 10	0100	*1,760	*5.17	June 25	0500	1,150	4.42
June 16	0100	1,450	4.85				

Minimum daily discharge, 36 ft³/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	124	72	60	40	54	65	251	484	478	279	107
2	149	124	72	48	36	57	78	278	494	509	276	112
3	143	124	70	50	46	54	113	372	578	534	276	116
4	187	116	70	50	48	50	166	480	546	555	253	118
5	239	108	68	50	46	48	117	490	648	545	237	120
6	187	108	68	54	48	59	107	470	785	530	217	120
7	169	105	68	52	46	64	124	454	1020	507	207	118
8	163	103	70	54	50	64	153	505	1360	479	202	120
9	150	101	70	56	47	70	172	486	1520	498	195	108
10	147	98	70	55	43	94	161	498	1430	478	193	96
11	139	99	71	54	40	103	185	404	1220	455	193	98
12	143	99	71	54	44	92	200	337	1160	419	183	116
13	158	99	72	49	46	80	233	319	1100	457	169	96
14	174	99	70	48	44	77	252	295	1080	446	161	92
15	158	88	70	48	46	81	284	309	1140	399	161	125
16	150	91	67	48	50	88	303	315	1150	355	152	126
17	165	96	64	46	49	89	288	303	968	354	145	105
18	161	94	65	50	49	91	303	303	978	393	154	108
19	152	89	65	50	47	83	282	331	1030	449	154	173
20	150	81	67	50	50	81	223	343	922	423	143	140
21	145	78	63	51	50	88	200	313	949	375	150	213
22	147	80	60	51	49	78	186	294	897	405	139	205
23	147	81	44	50	49	70	174	303	784	414	128	188
24	143	83	40	49	46	74	167	376	759	402	120	159
25	139	83	44	49	49	83	174	456	1010	351	114	136
26	143	80	55	50	50	83	186	501	690	340	112	128
27	143	70	63	51	49	72	174	608	510	304	112	128
28	132	75	68	51	51	70	188	649	494	312	110	136
29	130	77	65	51	---	68	188	699	515	333	108	150
30	132	71	61	49	---	64	200	661	475	304	101	127
31	126	---	61	42	---	64	---	596	---	282	103	---
TOTAL	4731	2824	2004	1570	1308	2293	5646	12999	26696	13085	5247	3884
MEAN	153	94.1	64.6	50.6	46.7	74.0	188	419	890	422	169	129
MAX	239	124	72	60	51	103	303	699	1520	555	279	213
MIN	120	70	40	42	36	48	65	251	475	282	101	92
AC-FT	9380	5600	3970	3110	2590	4550	11200	25780	52950	25950	10410	7700

CAL YR 1984 TOTAL 101711 MEAN 278 MAX 1630 MIN 40 AC-FT 201700
WTR YR 1985 TOTAL 82287 MEAN 225 MAX 1520 MIN 36 AC-FT 163200

09147000 DALLAS CREEK NEAR RIDGWAY, CO

LOCATION.--Lat 38°10'40", long 107°45'28", on line between sec.4 and 5, T.4 5 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 25 ft downstream from county bridge, 1.5 mi upstream from mouth, and 15 mi northwest of Ridgway.

DRAINAGE AREA.--96.2 mi².

PERIOD OF RECORD.--March 1922 to October 1927, October 1955 to September 1971, October 1979 to current year.

REVISED RECORDS.--WSP 1924: 1960: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,980 ft above National Geodetic Vertical Datum of 1929, from topographic map. Mar. 1, 1922 to Oct. 31, 1927, nonrecording gage at different datum.

REMARKS.--Estimated daily discharges: Nov. 27-28, 30, Dec. 1, 3-10, 14, 18, 21-27, Jan. 2-11, 13-22, 24, 30, 31, Feb. 1-17, 19, 24, 27-28, Mar. 1, 4. Records good except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 4,500 acres above and 700 acres below station. One small ditch imports water from Leopard Creek (Dolores River basin) to drainage above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 41.3 ft³/s; 29,920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,120 ft³/s, Aug. 15, 1923, gage height, 4.40 ft, datum then in use, from rating curve extended above 160 ft³/s; maximum gage height, 6.13 ft, July 21, 1983; minimum daily discharge, 0.21 ft³/s, June 19, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 402 ft³/s at 2130 Apr. 17, gage height, 5.31 ft; minimum daily, 16 ft³/s, Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	58	30	21	18	28	43	168	125	100	97	22
2	78	62	31	18	16	30	50	168	112	108	97	21
3	72	61	30	18	20	27	93	177	114	123	92	21
4	69	54	28	18	22	24	154	221	107	125	85	22
5	78	50	28	19	20	27	195	198	107	131	80	24
6	81	48	28	20	22	33	178	180	107	139	82	25
7	69	49	28	19	22	35	168	168	119	139	64	34
8	55	49	28	20	22	39	187	158	154	133	58	35
9	49	47	28	20	20	40	205	153	184	139	54	36
10	49	41	28	20	19	126	232	189	165	139	54	36
11	49	41	27	20	18	155	248	163	145	129	53	36
12	54	38	27	20	19	95	242	158	137	111	49	43
13	69	37	27	20	20	60	257	175	133	113	44	44
14	71	34	26	22	22	53	257	190	141	114	43	42
15	76	31	27	22	24	66	278	162	151	103	42	53
16	70	33	28	22	26	77	284	132	181	95	40	54
17	74	34	27	20	26	85	291	131	162	98	38	45
18	73	33	26	22	27	82	253	137	147	106	38	47
19	67	30	27	22	26	76	201	145	147	117	39	58
20	64	31	27	22	27	76	156	149	149	125	36	55
21	62	32	24	24	27	76	165	139	149	117	37	90
22	64	34	22	24	27	64	151	123	153	117	37	70
23	65	33	20	24	26	51	131	123	126	137	36	62
24	65	31	18	24	26	65	121	123	125	151	36	55
25	64	31	20	24	28	78	156	125	181	153	32	51
26	64	28	22	23	26	69	153	141	150	141	27	49
27	65	28	26	23	26	50	149	151	112	112	26	48
28	64	30	32	23	26	34	158	153	104	107	25	53
29	62	32	26	23	---	40	165	147	107	114	25	59
30	56	30	24	22	---	39	170	143	100	112	23	51
31	55	---	23	19	---	42	---	141	---	100	23	---
TOTAL	2017	1170	813	658	648	1842	5491	4831	4094	3748	1512	1341
MEAN	65.1	39.0	26.2	21.2	23.1	59.4	183	156	136	121	48.8	44.7
MAX	81	62	32	24	28	155	291	221	184	153	97	90
MIN	49	28	18	18	16	24	43	123	100	95	23	21
AC-FT	4000	2320	1610	1310	1290	3650	10890	9580	8120	7430	3000	2660

CAL YR 1984 TOTAL 33362 MEAN 91.2 MAX 415 MIN 17 AC-FT 66170
WTR YR 1985 TOTAL 28165 MEAN 77.2 MAX 291 MIN 16 AC-FT 55870

09147500 UNCOMPAHGRE RIVER AT COLONA, CO

LOCATION.--Lat 38°19'53", long 107°46'44", in NW¼NW¼ sec.17, T.47 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 15 ft downstream from county highway crossing, 0.2 mi north of Colona, and 1.0 mi upstream from Beaton Creek.

DRAINAGE AREA.--443 mi².

PERIOD OF RECORD.--April 1903 to November 1905, April to June 1906 (gage heights and discharge measurements only), October 1912 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Colona" 1904-6, 1922-34.

REVISED RECORDS.--WSP 1313: 1904. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,318.80 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Sept. 30, 1949.

REMARKS.--Estimated daily discharges: Oct. 18-19, Nov. 27-29, Dec. 2-18, Jan. 11-17, Feb. 1-28, Mar. 10-18, Apr. 4-5, 8-15, Aug. 11-14, Sept. 17-19. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by water diverted from West Fork Cimarron Creek, Mineral Creek (San Juan River basin), and Leopard Creek (Dolores River basin), diversions for irrigation of about 19,000 acres (part of which is below station), and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--75 years (water years 1904-5, 1913-85), 271 ft³/s; 196,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,080 ft³/s, June 13, 14, 1921; minimum daily, 12 ft³/s, Sept. 19, 1956, May 7, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,290 ft³/s at 0300 June 9, gage height, 5.15 ft; minimum daily, 70 ft³/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	223	135	115	80	107	175	893	954	778	454	95
2	196	223	135	91	75	116	218	892	917	789	460	101
3	193	219	130	96	85	111	364	1130	1030	821	441	98
4	283	209	130	104	90	100	700	1400	947	861	405	99
5	376	196	125	111	85	100	600	1400	1060	862	374	102
6	297	205	125	117	90	111	513	1330	1250	854	344	102
7	259	199	125	115	85	118	548	1230	1480	826	316	107
8	244	196	130	113	90	123	650	1310	2030	769	292	121
9	233	196	130	111	85	139	750	1230	2120	781	283	116
10	223	173	130	107	80	200	700	1300	2010	755	268	109
11	209	190	135	100	70	275	750	1080	1780	710	270	107
12	219	178	130	100	80	250	800	901	1710	663	260	146
13	246	178	130	95	85	225	950	901	1630	726	240	132
14	290	173	130	100	80	200	1000	878	1590	704	220	125
15	283	155	120	100	85	225	1100	901	1650	631	206	172
16	238	163	120	100	90	250	1170	841	1790	569	180	236
17	282	175	115	100	90	250	1140	783	1540	566	172	150
18	275	170	120	111	90	250	1170	803	1500	592	178	220
19	265	155	120	105	85	244	1020	818	1570	667	176	280
20	264	143	119	102	90	209	775	899	1460	686	158	208
21	251	138	115	103	90	245	703	820	1520	618	163	364
22	251	148	98	100	90	227	676	755	1460	641	155	355
23	258	153	104	97	90	176	618	734	1310	738	143	320
24	251	153	107	97	85	200	598	848	1260	696	135	287
25	240	150	105	97	90	260	668	973	1530	651	123	245
26	247	140	113	96	90	274	726	1080	1200	617	115	229
27	274	130	117	100	90	213	683	1240	878	541	105	226
28	258	140	125	96	95	179	753	1330	831	514	105	226
29	244	150	125	96	---	176	721	1350	860	561	104	297
30	247	132	119	93	---	173	743	1270	798	544	92	241
31	233	---	117	86	---	174	---	1150	---	476	92	---
TOTAL	7807	5153	3779	3154	2410	5900	21982	32470	41665	21207	7029	5616
MEAN	252	172	122	102	86.1	190	733	1047	1389	684	227	187
MAX	376	223	135	117	95	275	1170	1400	2120	862	460	364
MIN	178	130	98	86	70	100	175	734	798	476	92	95
AC-FT	15490	10220	7500	6260	4780	11700	43600	64400	82640	42060	13940	11140

CAL YR 1984 TOTAL 215048 MEAN 588 MAX 3360 MIN 72 AC-FT 426500
WTR YR 1985 TOTAL 158172 MEAN 433 MAX 2120 MIN 70 AC-FT 313700

09149500 UNCOMPAHGRE RIVER AT DELTA, CO

LOCATION.--Lat 38°44'31", long 108°04'49", in SW¼SW¼ sec.13, T.15 S., R.96 W., Delta County, Hydrologic Unit 14020006, on right bank 525 ft downstream from 5th Street Bridge at west edge of Delta and 1.1 mi upstream from mouth.

DRAINAGE AREA.--1,129 mi².

PERIOD OF RECORD.--April 1903 to October 1931 (no winter records in most years), September 1938 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Delta" 1907-24.

REVISED RECORDS.--WSP 1243: 1904. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,926.49 ft above National Geodetic Vertical Datum of 1929. Feb. 18, 1960, to Mar. 26, 1963, water-stage recorder at site 750 ft upstream at datum 3.43 ft, higher. Mar. 27, 1963, to May 12, 1965, water-stage recorder at site 1,050 ft upstream at datum 6.08 ft, higher. See WSP 1733 or 1924 for history of changes prior to Feb. 18, 1960.

REMARKS.--Estimated daily discharges: Oct. 17 to Nov. 30. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by water diverted from Gunnison River (see record of diversion through Gunnison tunnel published with station 09128000) and other adjacent basins, diversions for irrigation of about 90,000 acres above station, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--49 years (water years 1908, 1921, 1939-85), 295 ft³/s; 213,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 5,800 ft³/s, May 15, 1984, gage height, 8.85 ft, from rating curve extended above 3,400 ft³/s; no flow at times in 1908; minimum daily determined since beginning of diversion through Gunnison tunnel, 7.0 ft³/s, July 10-15, 17, 21, 24-28, 1910.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,760 ft³/s at 0730 May 5, gage height, 6.28 ft (from peak-stage indicator); minimum daily , 81 ft³/s, Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	583	460	196	166	81	140	571	1180	685	318	472	122
2	461	450	209	124	89	147	618	1160	503	322	499	162
3	377	450	203	120	90	161	726	1470	515	371	467	217
4	487	460	222	137	101	132	1030	1820	434	442	409	206
5	625	440	202	128	96	133	813	2080	419	500	357	215
6	592	410	193	138	106	139	769	1830	530	487	278	209
7	502	390	207	145	97	187	821	1560	694	500	220	286
8	468	380	207	156	90	202	940	1450	1210	454	204	338
9	490	360	224	154	103	190	1070	1300	1490	392	176	373
10	493	350	209	139	109	216	1300	1300	1580	397	158	414
11	473	350	254	128	99	467	1410	1120	1370	360	148	390
12	473	350	252	125	99	486	1400	855	1200	346	149	415
13	560	360	219	124	108	365	1550	944	1030	367	139	425
14	585	350	206	133	134	339	1510	817	985	395	128	406
15	651	340	207	135	133	331	1650	861	957	342	122	517
16	587	280	199	154	115	344	1660	650	1110	276	114	730
17	560	280	196	150	120	389	1730	564	950	209	102	644
18	570	310	185	115	128	427	1800	516	758	375	106	592
19	540	320	191	126	138	419	1610	662	790	438	95	566
20	520	300	191	138	151	338	1140	800	712	584	100	583
21	500	260	182	127	158	345	947	759	672	639	96	657
22	490	230	158	118	174	376	968	722	660	591	99	707
23	500	240	152	115	150	259	799	548	543	932	93	726
24	520	240	166	113	127	212	680	547	425	861	100	637
25	500	230	169	113	122	289	718	640	628	854	107	573
26	490	220	190	110	134	348	1160	772	660	776	108	552
27	500	200	210	116	132	299	903	958	321	684	105	557
28	520	180	250	114	124	309	1020	1010	274	601	96	514
29	480	190	232	112	---	442	954	998	416	628	97	678
30	460	192	196	112	---	514	930	870	373	633	102	525
31	470	---	186	90	---	528	---	768	---	528	102	---
TOTAL	16027	9572	6263	3975	3308	9473	33197	31531	22894	15602	5548	13936
MEAN	517	319	202	128	118	306	1107	1017	763	503	179	465
MAX	651	460	254	166	174	528	1800	2080	1580	932	499	730
MIN	377	180	152	90	81	132	571	516	274	209	93	122
AC-FT	31790	18990	12420	7880	6560	18790	65850	62540	45410	30950	11000	27640

CAL YR 1984 TOTAL 255237 MEAN 697 MAX 4520 MIN 120 AC-FT 506300
WTR YR 1985 TOTAL 171326 MEAN 469 MAX 2080 MIN 81 AC-FT 339800

09151500 ESCALANTE CREEK NEAR DELTA, CO

LOCATION.--Lat 38°45'24", long 108°15'34", in E½ sec.8, T.15 S., R.97 W., Sixth Principal Meridian, Delta County, Hydrologic Unit 14020005, on left bank just upstream from county bridge, 0.2 mi upstream from mouth, and 10.5 mi west of Delta.

DRAINAGE AREA.--209 mi^2.

PERIOD OF RECORD.--April 1922 to September 1923, May 1976 to current year.

REVISED RECORDS.--WSP 1313: 1923 (monthly runoff). WDR CO-84-2: 1979.

GAGE.--Water-stage recorder. Elevation of gage is 4,810 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to September 1923, nonrecording gage at different datum operated by State Engineer of Colorado.

REMARKS.--Estimated daily discharges: Oct. 1-9, Dec. 6 to Feb. 23, Apr. 22 to May 2, June 11-29, July 15-18. Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years, 60.9 ft^3/s; 44,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,050 ft^3/s, July 24, 1977, gage height, 8.54 ft, from floodmarks, from rating curve extended above 320 ft^3/s, on basis of slope-area measurement of peak flow; no flow, June 23-25, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,330 ft^3/s at 2400 May 4, gage height, 7.01 ft; minimum daily, 0.12 ft^3/s, July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	17	12	13	16	14	85	560	164	8.5	5.1	1.1
2	19	17	12	12	15	16	96	660	135	5.8	4.1	.81
3	22	19	13	13	16	15	116	866	124	3.9	4.1	2.6
4	27	19	15	13	17	12	163	1070	116	3.7	3.9	2.8
5	32	17	14	14	17	14	170	954	110	1.5	3.5	1.6
6	29	19	14	14	17	19	193	826	100	.81	2.6	.82
7	26	19	14	15	17	16	291	823	94	1.7	2.6	.90
8	23	19	14	15	16	16	346	795	90	2.6	1.7	1.5
9	20	19	15	16	15	20	400	704	84	2.8	1.2	1.9
10	19	16	15	15	13	21	472	605	80	1.7	.72	1.5
11	19	14	16	14	12	40	509	538	74	.92	.53	1.2
12	26	15	17	13	13	56	566	461	70	.54	1.1	1.4
13	35	17	16	12	13	61	578	423	64	.19	1.1	3.0
14	33	18	16	15	13	54	582	382	60	.14	1.1	2.3
15	21	16	15	16	13	56	610	367	54	.13	.72	3.5
16	20	13	15	17	12	49	643	371	50	.13	.62	14
17	20	16	14	18	12	54	698	373	45	.13	.38	11
18	15	16	14	18	12	51	734	384	40	.12	.61	8.6
19	14	13	15	18	12	49	674	389	35	9.2	.71	13
20	13	12	16	18	12	52	527	379	34	64	.53	14
21	14	13	13	18	11	55	524	348	29	41	.45	12
22	14	14	11	18	11	51	470	312	26	24	.70	15
23	14	13	10	18	12	44	450	294	24	19	.38	16
24	14	14	9.0	17	12	49	410	310	22	16	.25	14
25	14	14	9.4	17	13	63	390	296	19	14	.25	12
26	13	12	12	18	14	75	380	287	17	10	.28	12
27	15	9.8	15	17	13	72	380	255	15	11	.22	12
28	16	13	19	16	16	68	400	226	13	9.8	.45	13
29	15	15	17	16	---	72	450	195	11	9.8	.79	16
30	15	12	15	16	---	77	500	182	9.4	8.9	.80	21
31	18	---	14	16	---	71	---	158	---	7.0	.62	---
TOTAL	612	460.8	436.4	486	385	1382	12807	14793	1808.4	279.01	42.11	230.53
MEAN	19.7	15.4	14.1	15.7	13.8	44.6	427	477	60.3	9.00	1.36	7.68
MAX	35	19	19	18	17	77	734	1070	164	64	5.1	21
MIN	13	9.8	9.0	12	11	12	85	158	9.4	.12	.22	.81
AC-FT	1210	914	866	964	764	2740	25400	29340	3590	553	84	457

CAL YR 1984 TOTAL 20773.4 MEAN 56.8 MAX 598 MIN 1.4 AC-FT 41200
WTR YR 1985 TOTAL 33722.25 MEAN 92.4 MAX 1070 MIN .12 AC-FT 66890

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO

LOCATION.--Lat 38°59'00", long 108°27'00", in NE¼SW¼ of sec.14, T.2 S., R .1 E., Ute Meridian, Mesa County, Hydrologic Unit 14020005, on right bank 180 ft upstream from bridge on State Highway 141, 0.4 mi downstream from Whitewater Creek, 0.5 mi south of Whitewater, and 8 mi southeast of Grand Junction.

DRAINAGE AREA.--7,928 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to December 1895 (gage heights only), October 1896 to September 1899, October 1901 to October 1906, October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Whitewater" 1901-6.

REVISED RECORDS.--WSP 509: Drainage area at former site. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,628.12 ft above National Geodetic Vertical Datum of 1929. See WSP 1733 or 1924 for history of changes prior to October 1959.

REMARKS.--No estimated daily discharges. Records good. Records show flow that enters Colorado River from Gunnison River basin except for about 60 ft^3/s diverted below gage during irrigation season. Natural flow of river affected by diversions for irrigation of about 233,000 acres above station, storage reservoirs, and return flow from irrigated lands.

AVERAGE DISCHARGE.--77 years (water years 1897-99, 1902-06, 1917-85), 2,602 ft^3/s; 1,885,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 35,700 ft^3/s, May 23, 1920, gage height, 14.95 ft, site and datum then in use, from rating curve extended above 22,000 ft^3/s; minimum daily, 106 ft^3/s, July 20, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,800 ft^3/s at 1700 May 5, gage height, 10.90 ft; minimum daily, 1,220 ft^3/s, Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2720	2990	2700	2610	3270	3550	3790	10800	8670	3450	2650	1410
2	2940	2980	2690	2450	3190	3670	3930	11400	7640	3270	2580	1480
3	2460	2970	2640	2740	3370	3710	4330	12300	7490	3450	2610	1630
4	3180	2940	2660	2920	3280	3650	4960	13700	7420	3610	2560	1690
5	3300	2920	2610	2950	3240	3630	4890	15100	7770	3770	2490	1670
6	3380	2900	2570	3000	3270	3640	4810	14800	8090	3710	2170	1660
7	3120	2900	2560	3060	3230	3640	5130	14300	8470	3650	1900	1700
8	3040	2870	2380	3300	3300	3610	5550	14100	9400	3580	1850	1950
9	3020	2870	2680	3330	3380	3550	6320	14200	11300	3240	1760	1930
10	2980	2850	2730	3350	3410	3530	7240	13500	11700	2930	1650	1990
11	2990	2830	2740	3310	3290	3920	7500	14000	10100	2690	1650	2010
12	3000	2840	2340	3280	3260	4080	7790	12000	9000	2550	1650	2240
13	3290	2790	2180	3200	3340	3950	9030	11000	8650	2540	1640	2270
14	3300	2770	2210	3180	3340	3420	9250	9160	8390	2670	1600	2260
15	3500	2770	2220	3200	3360	3760	9730	8360	7890	2590	1600	2440
16	3280	2760	2690	3130	3390	3690	10700	7730	6420	2430	1620	3010
17	3200	2780	2690	3170	3410	3770	11100	7840	7000	2320	1580	2870
18	3300	2790	2160	3220	3450	3800	11100	8150	6680	2470	1740	2630
19	3340	2760	2160	3340	3520	3830	11300	8410	7230	2720	1740	2730
20	3230	2730	2150	3420	3500	3770	9590	8690	7600	2930	1510	2760
21	3180	2700	1720	3530	3520	3800	8780	8360	7650	3110	1510	2960
22	3160	2700	1710	3540	3580	3810	8490	8250	7690	3060	1380	3080
23	3170	2720	2510	3530	3520	3680	8670	8090	7180	3420	1220	3140
24	3200	2750	2500	3560	3450	3600	8500	8610	6910	3550	1240	3010
25	3130	2750	2570	3570	3440	3710	8810	9020	7220	3540	1290	2960
26	3040	2770	2630	3640	3430	3950	9050	9540	7490	3210	1310	2220
27	3030	2650	1740	3670	3480	4100	8720	10200	6670	3120	1250	1840
28	3100	2610	1980	3670	3530	4320	9190	10300	5670	2910	1290	2630
29	3070	2730	2280	3660	---	4720	9750	10500	5360	3060	1310	3600
30	3110	2740	2740	3660	---	4680	10100	10100	3780	3070	1300	3280
31	3030	---	2670	3390	---	3940	---	9110	---	2940	1360	---
TOTAL	96790	84130	74810	101580	94750	118480	238100	331620	232530	95560	53010	71050
MEAN	3122	2804	2413	3277	3384	3822	7937	10700	7751	3083	1710	2368
MAX	3500	2990	2740	3670	3580	4720	11300	15100	11700	3770	2650	3600
MIN	2460	2610	1710	2450	3190	3420	3790	7730	3780	2320	1220	1410
AC-FT	192000	166900	148400	201500	187900	235000	472300	657800	461200	189500	105100	140900

CAL YR 1984 TOTAL 1928680 MEAN 5270 MAX 23200 MIN 1710 AC-FT 3826000
WTR YR 1985 TOTAL 1592410 MEAN 4363 MAX 15100 MIN 1220 AC-FT 3159000

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued
(Irrigation network station)
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1931 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1935 to September 1974, September 1975 to current year.
WATER TEMPERATURES: April 1949 to September 1974, September 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1975

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 microsiemens several days during July and September 1974; minimum, 194 microsiemens June 6, 1979.
WATER TEMPERATURE: Maximum, 30.0°C Aug. 13, 1958; minimum, 0.0°C on many days during winter months most years.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,050 microsiemens Sept.17; minimum recorded, 230 microsiemens Apr.30 (but may have been less during period of missing record during April, May, and June).
WATER TEMPERATURES: Maximum, 22.5°C several days during July and August; minimum, 0.0°C several days during December, January, and February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV 14...	1400	2770	727	8.5	7.5	30	9.6	K28	K78	300
JAN 31...	1400	3280	500	8.5	.0	6.2	11.9	K10	K44	210
MAR 26...	1300	3940	534	8.3	7.0	190	9.6	120	--	220
JUN 04...	1200	7440	388	8.3	15.0	65	8.2	K280	K250	150
JUL 23...	1030	3690	760	8.3	18.5	190	7.3	250	K970	350
SEP 30...	1300	3220	868	8.3	10.5	230	8.7	470	660	350

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
NOV 14...	75	27	44	1	2.8	123	260	6.3	.30	13
JAN 31...	55	17	27	.8	2.0	108	130	5.1	.20	13
MAR 26...	53	20	31	1	2.6	123	160	6.8	.30	13
JUN 04...	42	12	19	.7	2.0	84	110	3.2	.20	15
JUL 23...	95	28	44	1	3.3	152	270	6.3	.40	17
SEP 30...	88	32	54	1	3.9	141	330	8.7	.30	15

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
NOV 14...	510	500	.69	3810	.94	.010	.30	.070	.010	<.010
JAN 31...	324	310	.44	2870	.42	.040	.30	.050	.010	.010
MAR 26...	369	360	.50	3930	.44	.070	1.0	.280	.010	.020
JUN 04...	258	250	.35	5180	.69	.060	.30	.030	.020	<.010
JUL 23...	583	560	.79	5810	.97	.040	.30	.180	.010	.010
SEP 30...	653	620	.89	5680	.10	.090	1.0	.450	.020	.010

K BASED ON NON-IDEAL COLONY COUNT

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
NOV											
14...	1400	<10	<1	44	<.0	<1	<1	<1	1	15	<1
MAR											
26...	1300	50	<1	47	<.5	<1	<1	2	5	35	5
JUL											
23...	1030	20	1	89	<.5	<1	<1	<1	3	13	2
SEP											
30...	1300	20	1	68	<.5	2	<1	<1	4	19	1

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
NOV										
14...	41	14	<.1	2	2	6	<1	740	2	14
MAR										
26...	28	10	<.1	4	5	4	<1	480	4	8
JUL										
23...	40	3	<.1	3	4	7	<1	920	4	10
SEP										
30...	50	1	<.1	2	4	9	<1	930	2	17

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
24...	1500	3280	81	717	78
NOV					
14...	1400	2770	43	322	78
DEC					
19...	1400	1360	12	44	46
JAN					
31...	1400	3280	41	363	62
APR					
09...	1400	6450	1750	30500	61
JUN					
21...	1300	7660	259	5360	50

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG.C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	741	603	660	470	459	490		---	429	742	982
2	---	765	615	620	463	452	514		---	438	745	973
3	---	760	610	587	487	409	536		---	449	753	994
4	---	737	594	564	484	419	523		---	466	761	1020
5	---	733	590	561	472	410	514		---	481	775	1020
6	---	725	572	572	498	461	487		---	487	776	1020
7	---	750	570	580	503	436	450		---	497	795	1010
8	---	753	561	591	545	442	381		333	504	831	1020
9	---	739	617	605	538	457	364		313	509	844	1040
10	---	725	601	588	532	461	349		304	518	863	1010
11	---	752	612	575	520	486	374		331	528	872	993
12	---	749	624	566	509	509	428		347	537	879	987
13	---	767	658	552	524	523	445		347	547	886	1020
14	---	639	688	553	534	529	438		359	557	880	972
15	---	654	662	520	537	551	493		360	566	873	935
16	---	626	655	541	535	562	511		409	577	859	987
17	---	617	590	554	525	557	528		398	588	850	1000
18	---	625	593	557	550	569	499		384	597	853	913
19	---	625	653	569	544	566	462		405	630	724	917
20	---	616	730	577	561	573	441		363	656	667	925
21	---	621	685	570	577	548	438		371	724	693	885
22	---	618	865	581	535	527	414		364	710	---	873
23	---	619	658	568	553	546	408		366	746	---	869
24	---	614	569	569	524	571	429		372	765	---	843
25	782	617	570	571	502	573	368		380	753	---	823
26	771	599	608	562	501	619	356		390	749	---	806
27	---	587	633	565	492	592	---		395	734	---	934
28	---	579	875	563	459	513	357		400	741	969	987
29	734	603	851	574	---	477	344		418	740	955	862
30	763	632	779	542	---	479	322		424	741	986	---
31	733	---	702	497	---	467	---		---	743	986	---
MEAN	768	673	651	569	517	508	437		371	603	833	953

WTR YR 1985 MEAN 616 MAX 1040 MIN 304

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	12.5	9.5	8.5	4.0	3.0	2.5	1.0	.0	.0	5.5	2.5
2	14.5	12.5	9.5	8.5	4.0	3.0	1.5	.0	.0	.0	5.0	3.0
3	15.5	14.0	9.5	8.0	3.5	2.5	1.0	.0	1.0	.0	4.5	3.5
4	14.5	13.5	9.0	7.5	3.5	2.5	1.0	.5	1.5	.5	3.5	1.5
5	14.5	13.0	8.0	7.0	3.5	2.0	1.5	.5	1.0	.5	4.5	3.0
6	15.0	13.5	8.5	7.0	3.0	2.0	2.0	1.0	1.5	.5	6.0	4.0
7	15.0	13.5	8.5	7.5	3.0	1.5	2.5	1.5	1.5	.5	6.0	4.5
8	14.5	13.0	8.0	7.5	2.5	1.5	3.0	2.0	3.5	1.5	5.5	4.0
9	14.5	13.0	7.5	6.5	3.5	1.5	3.5	3.0	4.0	3.0	6.5	5.0
10	14.5	13.0	6.5	6.0	4.0	3.5	3.0	2.5	3.5	2.5	6.5	5.5
11	14.5	13.0	7.5	6.0	4.5	3.5	3.0	2.5	2.5	1.5	---	---
12	13.5	12.0	8.0	6.5	4.5	3.5	2.5	2.0	2.0	1.5	6.5	4.5
13	12.0	10.5	8.5	7.0	3.5	2.0	2.0	1.5	3.5	1.5	---	---
14	12.0	11.0	8.5	7.0	3.0	2.0	2.0	1.0	4.0	3.0	---	---
15	10.5	8.0	7.5	6.0	3.0	2.0	1.5	.5	4.0	3.0	7.0	6.0
16	8.0	7.0	6.5	5.5	3.0	2.0	1.0	.0	4.5	3.0	8.0	6.0
17	9.5	7.5	6.5	5.0	3.5	2.5	1.5	.5	4.5	4.0	8.0	7.0
18	8.5	8.0	6.5	5.5	3.5	2.0	2.0	1.0	5.5	4.0	8.0	6.5
19	8.0	7.5	6.5	5.5	4.0	2.0	3.0	1.5	5.0	3.5	8.5	7.0
20	9.0	7.5	6.0	5.0	3.5	2.5	3.0	2.0	5.0	4.0	8.0	6.5
21	9.5	8.5	6.0	4.5	2.5	1.5	3.0	2.5	6.0	3.5	8.5	6.0
22	9.0	8.5	6.0	4.5	1.5	.0	3.5	2.5	5.0	3.5	6.5	5.0
23	9.0	8.0	5.5	4.5	1.5	.0	3.0	2.0	4.0	3.0	---	---
24	8.5	7.5	5.5	4.5	1.5	.5	3.0	2.0	5.0	3.5	7.5	5.5
25	9.0	7.5	6.0	5.0	1.5	.5	3.5	2.5	4.5	4.0	8.5	7.0
26	9.0	8.0	5.0	3.0	2.5	.5	3.5	3.0	5.0	3.5	8.0	7.0
27	9.0	8.5	3.0	2.0	3.0	2.5	3.5	3.0	5.0	4.0	7.0	5.5
28	9.0	8.0	3.5	2.5	4.0	2.5	3.5	3.0	5.5	3.0	5.5	3.5
29	9.5	8.0	4.0	2.5	4.5	3.0	4.0	3.0	---	---	4.5	3.5
30	10.0	9.0	5.0	3.5	3.5	3.0	3.0	1.0	---	---	4.5	2.5
31	9.5	9.0	---	---	3.5	2.5	1.0	.0	---	---	6.0	5.0
MONTH	15.5	7.0	9.5	2.0	4.5	.0	4.0	.0	6.0	.0	8.5	1.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	5.0	12.0	11.0	12.5	11.0	19.0	16.5	20.5	18.0	21.0	19.0
2	8.5	4.5	11.5	11.0	---	---	19.5	17.0	20.5	18.0	20.5	18.5
3	9.5	7.5	12.5	11.0	---	---	19.5	17.5	21.0	18.0	19.5	17.5
4	9.5	6.0	12.0	11.0	---	---	19.5	17.5	21.0	18.5	19.5	17.5
5	8.5	5.5	12.0	10.5	---	---	19.0	17.5	20.5	18.0	20.0	17.0
6	9.5	7.5	12.0	11.0	---	---	19.0	17.5	21.0	17.5	19.5	16.5
7	10.0	8.5	12.5	11.0	---	---	19.5	17.5	22.0	18.0	18.0	16.0
8	9.5	9.0	12.5	11.0	16.5	15.5	20.0	17.5	21.5	18.5	17.5	14.5
9	9.5	9.0	11.5	10.0	16.0	15.0	20.5	18.0	22.0	18.5	17.5	15.0
10	9.5	8.5	11.5	10.5	15.5	14.0	21.0	18.5	20.5	17.5	16.5	15.5
11	9.5	9.0	11.0	9.5	14.5	13.5	21.5	19.0	21.0	17.5	15.5	14.0
12	10.0	9.0	10.5	8.5	14.5	14.5	22.0	19.0	20.0	17.0	16.0	13.0
13	10.0	8.5	10.0	7.5	15.0	14.5	22.5	19.5	20.5	16.5	16.0	13.5
14	9.5	8.5	10.5	9.0	15.5	15.0	22.5	19.5	20.5	16.5	17.0	14.0
15	9.5	9.0	12.0	11.0	16.0	15.0	22.5	19.5	20.5	16.5	16.0	15.0
16	10.5	9.5	13.0	11.0	17.0	15.5	22.0	19.0	20.5	17.0	16.0	14.0
17	10.0	9.5	11.5	10.5	16.5	14.5	22.0	19.5	20.0	16.5	17.5	15.0
18	10.0	9.0	12.0	11.5	16.0	15.0	22.0	19.5	21.5	17.5	16.0	15.0
19	9.5	7.5	12.5	11.0	17.0	15.5	20.5	19.5	20.5	17.5	15.5	14.0
20	8.0	7.0	11.5	10.5	15.5	15.0	20.5	18.5	21.0	17.5	15.5	14.0
21	8.5	7.5	12.0	10.5	15.5	15.5	21.0	19.5	21.5	18.0	15.0	13.5
22	8.5	7.0	12.0	---	15.5	15.0	20.0	19.0	22.5	18.5	15.5	14.0
23	9.0	6.5	13.5	12.0	15.5	15.0	20.0	18.0	22.5	18.5	14.0	13.0
24	10.0	9.0	13.5	12.5	16.0	15.0	20.0	18.0	22.0	18.0	14.0	12.5
25	10.0	8.0	14.0	12.5	15.0	14.0	18.5	17.0	21.0	18.0	14.0	12.0
26	8.0	7.0	13.5	12.5	14.0	13.0	19.0	17.0	21.5	18.0	14.5	12.0
27	10.0	7.5	13.5	12.0	14.0	13.0	20.0	17.5	21.0	19.0	14.5	11.5
28	11.0	9.5	13.5	12.5	15.0	13.5	19.0	17.5	21.5	19.0	14.0	12.5
29	11.0	9.5	---	---	15.5	14.5	18.5	17.0	22.5	19.0	12.0	10.5
30	11.5	9.0	13.0	11.5	17.5	15.0	19.0	17.0	21.5	20.0	12.0	10.0
31	---	---	12.5	11.0	---	---	20.0	17.5	22.0	19.0	---	---
MONTH	11.5	4.5	14.0	7.5	17.5	11.0	22.5	16.5	22.5	16.5	21.0	10.0
YEAR	22.5	.0										

09153290 REED WASH NEAR MACK, CO

LOCATION.--Lat 39°12'41", long 108°48'11", in SE¼SW¼ sec.27, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 250 ft upstream from unnamed tributary, 0.4 mi downstream from Peck and Beede Wash, and 3.5 mi east of Mack.

DRAINAGE AREA.--15.7 mi^2.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,505 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow is mostly return flow and waste water from irrigated lands under Government Highline and Grand Valley Canals. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--10 years, 48.6 ft^3/s; 35,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 390 ft^3/s, July 23, 1983, gage height, unknown, maximum recorded gage height, 6.09 ft, July 24, 1979; minimum daily discharge, 2.0 ft^3/s, Jan. 31, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 117 ft^3/s at 0600 June 26, gage height, 4.44 ft; minimum daily, 3.2 ft^3/s, March 9, 16-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	63	7.3	5.7	5.4	3.3	3.6	70	54	63	48	69
2	88	62	6.8	5.6	4.6	3.4	3.6	70	56	68	43	69
3	86	62	6.9	5.7	4.6	3.5	3.6	69	53	63	46	74
4	94	62	6.1	5.7	4.5	3.5	3.6	69	50	60	53	79
5	82	65	6.1	5.7	4.5	3.4	3.6	69	50	65	56	77
6	79	66	6.2	5.7	4.1	3.4	3.6	69	52	68	53	76
7	78	63	6.0	6.0	4.0	3.5	3.6	68	55	73	57	82
8	77	65	6.0	6.0	4.0	3.4	3.7	68	57	71	64	84
9	80	77	6.0	5.8	4.1	3.2	3.7	68	67	71	68	82
10	85	74	6.2	6.0	4.3	3.8	36	63	71	72	71	74
11	81	74	6.3	5.7	4.1	3.7	72	69	73	68	75	76
12	85	67	13	5.7	3.9	3.6	64	66	73	65	68	69
13	80	56	85	5.7	4.1	3.5	64	62	66	67	63	68
14	83	22	68	5.6	4.7	3.5	63	55	58	74	63	74
15	80	14	63	5.4	4.9	3.5	63	56	49	87	64	74
16	73	13	63	5.3	4.4	3.2	61	54	45	73	67	67
17	79	12	62	5.2	4.2	3.2	59	59	46	69	70	65
18	75	11	62	5.2	3.8	3.2	69	58	46	64	75	68
19	74	10	67	5.2	3.8	3.4	67	57	55	62	73	62
20	77	10	27	5.2	3.7	3.5	71	51	60	54	74	62
21	89	9.9	6.2	5.2	3.7	3.3	81	53	64	55	73	62
22	80	9.9	5.4	5.2	3.5	3.3	78	58	66	68	74	64
23	78	8.9	5.4	5.2	3.3	3.4	70	56	70	68	74	61
24	74	8.9	5.6	5.2	3.3	3.5	61	59	72	64	72	61
25	73	8.9	5.7	4.8	3.3	3.5	66	60	80	53	76	59
26	74	8.7	5.7	4.7	3.3	3.4	68	68	83	54	77	60
27	76	7.8	5.8	5.6	3.3	3.4	69	59	63	58	82	61
28	69	7.7	7.3	5.5	3.3	3.6	71	57	57	65	80	64
29	65	7.7	6.4	5.2	---	3.6	71	56	62	72	81	63
30	64	7.7	6.0	4.8	---	3.5	71	52	62	69	70	66
31	65	---	5.7	4.6	---	3.6	---	56	---	49	69	---
TOTAL	2436	1034.1	645.1	168.1	112.7	106.8	1427.6	1904	1815	2032	2079	2072
MEAN	78.6	34.5	20.8	5.42	4.02	3.45	47.6	61.4	60.5	65.5	67.1	69.1
MAX	94	77	85	6.0	5.4	3.8	81	70	83	87	82	84
MIN	64	7.7	5.4	4.6	3.3	3.2	3.6	51	45	49	43	59
AC-FT	4830	2050	1280	333	224	212	2830	3780	3600	4030	4120	4110

CAL YR 1984 TOTAL 16484.8 MEAN 45.0 MAX 120 MIN 3.2 AC-FT 32700
WTR YR 1985 TOTAL 15832.4 MEAN 43.4 MAX 94 MIN 3.2 AC-FT 31400

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 39°07'45", long 109°01'36", in SE¼NW¼ sec.5, T.11 S., R.104 W., Mesa County, Hydrologic Unit 14010005, on right bank 0.7 mi downstream from McDonald Creek, 12 mi southwest of Mack, Colo., and 1.5 mi upstream from Colorado-Utah State line.

DRAINAGE AREA.--17,843 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,325 ft above National Geodetic Vertical Datum of 1929, from topographic map. May 1951, to October 1979, water-stage recorder at site 5.7 mi upstream at different datum.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation. (Records include all return flow from irrigated areas).

AVERAGE DISCHARGE.--34 years, 6,267 ft^3/s; 4,540,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69,800 ft^3/s, May 27, 1984, gage height, 16.12 ft, (from high-water mark); minimum daily, 960 ft^3/s, Sept. 7, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 39,300 ft^3/s at 2200 May 5, gage height, 11.64 ft; minimum daily, 3,580 ft^3/s, Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6070	6760	6260	5890	5610	6530	7320	22600	28400	12600	7850	3710
2	6930	6620	6240	5510	5220	6800	7460	24600	25600	11900	7280	3800
3	6170	6580	6130	5140	5190	7110	7730	26800	24700	11600	7070	3900
4	6930	6550	5940	5280	5350	6710	8450	31300	25200	11500	6990	4100
5	7360	6470	5890	5280	5560	6580	9040	36800	25400	11400	6590	4150
6	7610	6450	5700	5650	5600	6610	8530	38200	26700	11100	6460	4140
7	7390	6620	5500	5910	5420	6770	8950	37000	28100	10800	5980	4190
8	7040	6660	5410	6350	5710	6760	9420	36600	31000	10400	5700	4400
9	6920	6720	5680	6710	6040	6740	10400	37200	36600	10000	5490	4430
10	6780	6720	5970	6620	6340	6800	12400	35800	37000	9320	5270	4380
11	6540	6630	5910	6430	6170	8160	13400	35800	36000	8710	5160	4430
12	6640	6730	5930	6270	5780	8670	14100	34300	32400	8320	5140	4820
13	7200	6840	5850	5980	5770	8190	15600	31200	28800	7980	5120	5050
14	7200	6810	5610	5700	5960	7010	16800	27100	27400	8600	5100	5080
15	7530	6650	5500	5540	5970	7170	17800	23900	27100	8520	4840	4990
16	7320	6500	5730	5620	5980	7190	19900	22000	25500	7950	4690	5720
17	7250	6490	5880	5660	5970	7290	22000	21900	25400	7680	4570	5830
18	7460	6420	5540	6110	6050	7380	22200	22100	24900	7850	4460	5630
19	7510	6300	5290	6290	6170	7440	23200	22900	23500	8240	4740	5860
20	7390	6210	5360	6510	6140	7450	23000	23700	23800	8730	4180	5640
21	7410	6130	5380	6640	6470	7540	21900	23200	22600	10700	4180	5680
22	7350	6090	4640	6700	7000	7440	20200	22800	22800	10800	4150	6010
23	7190	6230	5220	6510	6740	7700	18900	22600	22100	11500	3900	6150
24	7250	6420	5080	6410	6200	7170	17600	23400	20700	11400	3900	6220
25	7160	6480	5240	6320	6210	7220	17900	24900	20300	11100	3970	6000
26	6960	6530	5730	6300	6380	7540	18500	26400	21300	10200	3940	5860
27	6920	6410	5490	6430	6370	8080	17700	28600	19600	9420	3830	5010
28	7010	6080	5120	6600	6510	8470	17700	29800	16800	8830	3760	5050
29	6830	6180	6120	6670	---	8450	19200	30600	15000	8750	3830	6120
30	6850	6440	6010	6640	---	8530	20800	31400	13600	8990	3670	7230
31	6830	---	5950	6390	---	7970	---	30100	---	8580	3580	---
TOTAL	219000	194720	175300	190060	167880	229470	468100	885600	758300	303470	155390	153580
MEAN	7065	6491	5655	6131	5996	7402	15600	28570	25280	9789	5013	5119
MAX	7610	6840	6260	6710	7000	8670	23200	38200	37000	12600	7850	7230
MIN	6070	6080	4640	5140	5190	6530	7320	21900	13600	7680	3580	3710
AC-FT	434400	386200	347700	377000	333000	455200	928500	1757000	1504000	601900	308200	304600

CAL YR 1984 TOTAL 5039210 MEAN 13770 MAX 68300 MIN 3370 AC-FT 9995000
WTR YR 1985 TOTAL 3900870 MEAN 10690 MAX 38200 MIN 3580 AC-FT 7737000

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued
(National stream-quality accounting network station)

PERIOD OF RECORD.--October 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1979 to current year.
WATER TEMPERATURE: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1979.

REMARKS.--Water-quality data collection was moved 5.5 miles upstream to this site from previous site 09163530. Water-quality records for this site are considered to be equivalent to data obtained at old site. Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,940 microsiemens Aug. 13, 1981; minimum, 279 microsiemens June 3, 1984.
WATER TEMPERATURE: Maximum, 27.0°C Aug. 7-9, 1981; minimum, 0.0°C on many days during winter months

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,520 microsiemens Sept. 12 (but may have been exceeded during period of missing record Aug.6 to Sept.10); minimum, 277 microsiemens June 11.
WATER TEMPERATURE: Maximum, 23.0°C several days during July and August (but may have been exceeded during period of missing record during August); minimum, 0.0°C several days during February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 03...	1220	5920	1000	7.7	14.0	550	8.7	290	K1400	340
DEC 04...	0830	5690	885	8.2	2.0	4.0	11.7	K1	39	290
MAR 20...	1300	6830	805	8.2	10.0	330	9.4	K65	350	260
APR 03...	1120	7300	875	8.1	10.5	85	9.3	--	970	290
JUL 10...	1400	9490	660	8.1	21.0	34	--	240	380	250
SEP 24...	1230	6300	1120	7.9	14.0	130	8.8	560	720	420

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 03...	90	28	89	2	3.7	149	270	67	.40	11
DEC 04...	74	26	78	2	3.5	135	220	74	.30	11
MAR 20...	63	24	72	2	3.2	181	160	55	.30	12
APR 03...	70	28	89	2	4.0	146	230	57	.30	12
JUL 10...	70	19	51	1	2.7	115	160	42	.20	9.9
SEP 24...	110	34	91	2	4.1	159	320	68	.40	14

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT 03...	664	650	.90	10600	.63	<.010	2.3	.480	.010	<.010
DEC 04...	582	570	.79	8940	.53	.080	1.0	.070	.060	.030
MAR 20...	519	480	.71	9570	.71	.130	.60	.600	.040	.030
APR 03...	587	580	.80	11600	.66	.130	1.3	.180	.030	<.010
JUL 10...	430	420	.58	11000	.43	.030	.40	.140	.020	<.010
SEP 24...	772	740	1.0	13100	.91	.090	.90	.200	.030	<.010

K BASED ON NON-IDEAL COLONY COUNT

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT 03...	1220	10	<1	120	<.5	2	<1	<3	6	8	6
DEC 04...	0830	40	<1	55	<.5	2	9	<3	9	73	2
MAR 20...	1300	40	<1	58	<.5	<1	1	<3	4	34	4
JUL 10...	1400	30	<1	62	<.5	<1	<1	<3	6	30	2
SEP 24...	1230	30	1	70	<.5	<1	<1	4	10	16	1

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 03...	41	6	<.1	<10	<1	6	<1	920	<6	12
DEC 04...	35	25	4.3	<10	<2	5	<1	740	<6	35
MAR 20...	28	7	1.0	<10	4	3	<1	630	<6	4
JUL 10...	26	4	.1	<10	<1	4	5	620	<6	18
SEP 24...	50	5	--	10	2	6	<1	1100	<6	11

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 03...	1140	5920	1400	22400	95
DEC 04...	1215	5690	14	215	61
MAR 07...	1145	6640	119	2130	78
APR 10...	1300	11800	2220	70700	79
JUN 12...	1200	33300	730	65600	61
AUG 15...	1300	4710	102	1300	77

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG C, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	913	867	879	738	717	797	481	383	579	628	---
2	1030	911	869	881	705	731	827	453	399	611	710	---
3	1030	900	889	872	624	750	---	434	403	637	928	---
4	1060	896	880	834	703	745	---	409	397	645	937	---
5	1030	893	878	844	759	742	---	385	390	636	904	---
6	1050	890	891	886	771	735	---	372	379	653	---	---
7	997	897	884	861	758	743	---	366	369	672	---	---
8	966	901	899	844	786	746	---	362	356	674	---	---
9	960	901	921	811	790	745	---	361	334	664	---	---
10	960	898	909	784	781	751	---	360	336	659	---	---
11	962	902	887	760	774	794	---	361	304	680	---	1250
12	982	897	865	740	761	824	---	368	325	701	---	1320
13	965	905	902	775	757	796	---	397	347	714	---	1230
14	979	912	937	790	777	822	---	422	336	721	---	1240
15	971	926	937	784	784	867	---	439	344	771	---	1200
16	980	927	934	792	772	813	---	450	329	753	---	1180
17	963	920	902	816	775	817	---	450	339	771	---	1220
18	961	905	878	820	788	745	---	444	352	792	---	1200
19	954	902	894	800	792	803	---	434	392	775	---	1210
20	947	908	938	773	804	801	---	425	391	757	---	1150
21	931	904	943	760	816	792	---	427	403	693	---	1150
22	941	913	963	741	825	784	---	437	411	627	---	1120
23	938	908	993	740	811	885	---	431	414	663	---	1120
24	932	903	888	733	790	862	---	421	431	627	---	1110
25	934	877	891	720	772	876	---	403	451	632	---	1100
26	936	867	909	740	761	883	570	392	467	643	---	1090
27	927	857	875	763	753	765	592	379	473	656	---	1120
28	933	858	937	771	741	745	569	373	496	662	---	1210
29	946	846	989	767	---	713	540	369	522	655	---	1200
30	929	871	950	744	---	715	508	364	544	814	---	1070
31	926	---	910	728	---	732	---	364	---	647	---	---
MEAN	969	897	910	792	767	782	629	404	394	683	821	1170

WTR YR 1985 MEAN 761 MAX 1320 MIN 304

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	13.0	9.5	8.0	4.5	3.0	4.0	3.0	.0	.0	6.0	5.0
2	14.5	13.5	9.0	8.0	3.5	2.5	3.0	1.5	.0	.0	6.0	5.5
3	14.5	13.5	9.5	8.5	3.0	2.0	1.5	1.0	.0	.0	6.0	5.0
4	14.5	13.5	9.5	8.0	2.5	2.0	1.5	1.0	.0	.0	5.5	4.5
5	15.5	13.5	8.5	7.5	4.0	1.5	1.5	1.0	.0	.0	5.0	4.0
6	15.5	14.0	8.5	7.5	3.0	2.5	2.0	1.5	.0	.0	6.5	5.0
7	15.0	13.5	8.0	7.5	2.5	1.0	2.5	2.0	.5	.0	7.0	6.0
8	15.0	13.5	8.5	8.0	1.0	.5	2.5	2.0	1.0	.0	6.5	5.5
9	15.0	13.5	9.5	7.0	2.0	1.0	3.5	2.0	1.5	1.0	7.0	6.0
10	15.0	13.5	8.5	7.5	4.0	2.0	3.0	2.5	1.5	1.0	7.5	7.0
11	15.0	12.0	7.5	6.5	5.0	4.0	2.5	2.5	1.0	.5	7.5	7.0
12	13.5	12.0	7.0	6.0	5.0	4.0	2.5	2.0	.5	.0	8.0	7.0
13	12.0	10.0	8.0	6.0	4.0	3.5	2.0	1.0	1.5	.0	8.5	6.5
14	12.0	10.0	8.0	7.0	3.0	2.5	1.5	.5	2.0	.5	8.0	6.5
15	11.0	8.5	7.5	6.5	2.5	2.0	1.0	.5	2.5	1.0	9.5	8.0
16	8.5	6.5	7.0	5.5	3.0	2.0	1.0	.5	2.5	1.5	10.0	8.5
17	7.5	6.0	6.5	5.0	4.5	2.0	1.0	.5	3.0	2.0	10.0	9.5
18	8.5	6.0	6.5	5.0	4.5	3.5	1.0	.5	3.0	2.0	10.5	9.5
19	8.0	6.5	7.0	5.5	5.0	3.5	2.0	1.0	3.5	2.0	11.0	10.0
20	7.5	6.5	6.0	4.5	4.5	3.0	2.0	1.5	5.0	3.0	10.5	9.5
21	8.0	6.5	5.0	4.5	4.0	2.5	2.0	1.5	5.5	4.0	10.5	9.0
22	8.0	6.5	5.0	4.0	3.5	2.5	2.5	1.5	5.0	4.5	9.0	7.5
23	8.5	7.0	6.0	4.5	2.0	1.5	2.0	1.5	5.0	4.0	8.0	6.5
24	8.5	7.0	5.5	4.5	2.0	1.0	2.0	1.5	4.5	3.5	9.0	7.0
25	8.0	6.5	5.0	4.0	2.5	1.0	2.0	1.5	4.5	4.0	10.0	8.5
26	8.5	7.0	5.5	4.5	2.5	1.5	2.5	2.0	5.0	4.0	10.0	9.0
27	8.5	8.0	5.0	3.0	2.5	2.0	3.0	2.0	5.5	4.0	9.5	7.5
28	8.5	7.0	3.0	2.0	3.0	2.5	3.0	2.5	6.0	5.0	9.0	7.0
29	9.0	7.5	5.0	2.0	4.0	3.0	3.5	2.5	---	---	7.0	6.0
30	9.5	8.0	5.0	3.5	4.5	3.5	3.0	2.0	---	---	7.5	4.5
31	9.5	8.5	---	---	4.5	4.0	2.0	.0	---	---	7.5	5.5
MONTH	15.5	6.0	9.5	2.0	5.0	.5	4.0	.0	6.0	.0	11.0	4.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	7.0	13.5	10.5	---	---	18.5	16.0	22.5	21.0	---	---
2	10.5	8.0	13.5	10.5	---	---	19.0	17.0	22.5	21.5	---	---
3	---	---	13.5	11.0	---	---	20.0	17.5	23.0	21.0	---	---
4	---	---	---	---	---	---	20.5	18.5	23.0	21.5	---	---
5	---	---	---	---	---	---	20.5	18.5	22.5	21.5	---	---
6	---	---	---	---	---	---	20.5	18.5	---	---	---	---
7	---	---	---	---	---	---	20.5	18.5	---	---	---	---
8	---	---	---	---	---	---	21.0	19.0	---	---	---	---
9	---	---	---	---	---	---	21.5	19.5	---	---	---	---
10	---	---	---	---	---	---	22.0	20.5	---	---	---	---
11	---	---	13.5	10.5	---	---	22.0	20.0	---	---	16.5	16.0
12	---	---	---	---	---	---	22.0	20.5	---	---	16.5	15.0
13	---	---	---	---	---	---	22.5	21.0	---	---	16.5	15.0
14	---	---	---	---	---	---	22.5	21.5	---	---	17.5	15.5
15	---	---	---	---	---	---	22.5	21.0	---	---	17.5	16.5
16	---	---	---	---	---	---	22.0	21.0	---	---	17.5	15.5
17	---	---	---	---	---	---	22.0	20.5	---	---	17.0	16.5
18	---	---	---	---	---	---	23.0	21.0	---	---	17.0	15.5
19	---	---	---	---	---	---	23.0	21.0	---	---	16.5	15.0
20	---	---	---	---	16.0	14.0	22.5	21.5	---	---	16.0	15.0
21	---	---	---	---	16.5	14.5	22.0	20.5	---	---	16.0	15.0
22	---	---	---	---	17.0	15.0	21.0	20.0	---	---	16.5	15.5
23	---	---	---	---	16.5	15.0	21.0	19.5	---	---	15.5	14.5
24	---	---	---	---	16.5	15.0	21.5	19.0	---	---	14.5	14.0
25	---	---	---	---	16.0	15.0	21.0	19.0	---	---	15.0	13.5
26	11.0	8.0	---	---	15.0	13.5	21.0	18.5	---	---	14.5	13.5
27	11.0	7.5	---	---	15.0	13.0	21.0	19.0	---	---	15.0	13.5
28	12.5	9.5	---	---	16.0	13.0	21.0	19.0	---	---	15.0	14.0
29	13.0	11.0	---	---	16.5	14.5	21.0	18.5	---	---	14.0	12.5
30	---	---	---	---	17.5	15.0	20.5	18.5	---	---	13.0	11.5
31	---	---	---	---	---	---	22.0	18.5	---	---	---	---
MONTH	13.0	7.0	13.5	10.5	17.5	13.0	23.0	16.0	23.0	21.0	17.5	11.5
YEAR	23.0	.0										

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

09163570 HAY PRESS CREEK ABOVE FRUITA RESERVOIR NO. 3, NEAR GLADE PARK, CO

LOCATION.--Lat 38°51'03", long 108°46'56", in NE¼SW¼ sec.10, T.14 S., R.102 W., Mesa County, Hydrologic Unit 14030001, on right bank, 10 mi southwest of Glade Park Post Office

DRAINAGE AREA.--0.77 mi^2.

PERIOD OF RECORD.--April 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,885 ft above National Geodetic Vertical Datum of 1929, from topographic map. April 1, 1983 to August 23, 1983, water-stage recorder at site 100 ft upstream, at datum 5 ft, higher.

REMARKS.--Estimated daily discharges: Oct 1-9, Oct. 12-Nov. 16, Nov. 17-Apr. 14, Aug. 12-17, Sept. 3-24. Records fair except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26 ft^3/s, May 14, 1984, gage height, 1.20 ft, from rating curve extended above 4.7 ft^3/s; minimum daily, 0.03 ft^3/s, Aug. 28, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 5.0 ft^3/s, and maximum (*).

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 4	0100	6.5	0.90	May 20	2300	*15	*1.02
May 9	0100	9.2	.97	May 25	0100	6.5	.91

Minimum daily discharge, 0.03 ft^3/s, Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.13	.13	.14	.18	.18	.22	3.2	4.2	.30	.10	.06
2	.11	.13	.13	.14	.18	.18	.22	3.5	3.2	.31	.09	.07
3	.11	.13	.13	.13	.18	.18	.24	4.8	2.9	.29	.08	.07
4	.12	.14	.13	.14	.18	.18	.24	6.4	2.6	.30	.09	.07
5	.13	.14	.13	.15	.18	.18	.24	5.8	2.3	.25	.08	.07
6	.15	.13	.13	.16	.18	.18	.24	5.4	1.8	.24	.07	.06
7	.15	.13	.13	.18	.17	.18	.26	6.5	1.5	.24	.08	.06
8	.16	.13	.13	.19	.17	.18	.34	6.0	1.6	.20	.09	.06
9	.16	.13	.13	.20	.17	.18	.45	9.1	1.3	.21	.08	.07
10	.15	.13	.13	.20	.17	.18	.60	7.2	1.3	.18	.08	.06
11	.15	.14	.13	.19	.17	.18	.78	5.6	1.3	.18	.08	.06
12	.14	.13	.13	.18	.18	.19	.97	4.2	1.1	.17	.08	.06
13	.14	.13	.12	.18	.18	.20	1.3	3.2	.82	.18	.08	.05
14	.14	.13	.12	.18	.17	.19	1.6	3.2	.92	.15	.08	.05
15	.14	.13	.13	.18	.17	.19	2.0	3.5	.74	.14	.07	.05
16	.14	.13	.13	.18	.17	.20	2.9	4.2	.62	.14	.07	.05
17	.14	.13	.13	.18	.17	.20	3.2	4.5	.53	.16	.07	.05
18	.14	.13	.12	.18	.17	.21	3.6	4.5	.49	.18	.07	.05
19	.14	.13	.12	.18	.18	.21	3.2	4.2	.39	.15	.08	.04
20	.14	.13	.13	.18	.18	.21	2.0	5.4	.39	.15	.08	.04
21	.14	.13	.13	.18	.18	.21	1.9	7.2	.38	.14	.08	.04
22	.14	.13	.14	.19	.18	.21	1.9	5.8	.39	.15	.07	.04
23	.13	.13	.13	.18	.18	.21	1.7	5.8	.43	.14	.06	.04
24	.13	.13	.13	.18	.18	.21	1.7	5.2	.32	.14	.06	.04
25	.13	.13	.13	.18	.18	.21	1.7	6.5	.39	.10	.06	.04
26	.13	.13	.13	.18	.18	.22	1.5	5.8	.32	.10	.07	.04
27	.13	.13	.14	.18	.18	.23	1.7	4.8	.34	.11	.04	.04
28	.13	.12	.14	.18	.18	.23	1.7	4.5	.39	.11	.03	.04
29	.13	.12	.14	.18	---	.23	2.3	3.9	.34	.14	.05	.05
30	.13	.13	.14	.18	---	.23	2.6	4.8	.32	.11	.04	.04
31	.14	---	.14	.17	---	.22	---	3.9	---	.11	.08	---
TOTAL	4.20	3.91	4.05	5.42	4.94	6.19	43.30	158.6	33.62	5.47	2.24	1.56
MEAN	.14	.13	.13	.17	.18	.20	1.44	5.12	1.12	.18	.07	.05
MAX	.16	.14	.14	.20	.18	.23	3.6	9.1	4.2	.31	.10	.07
MIN	.09	.12	.12	.13	.17	.18	.22	3.2	.32	.10	.03	.04
AC-FT	8.3	7.8	8.0	11	9.8	12	86	315	67	11	4.4	3.1

CAL YR 1984	TOTAL	160.30	MEAN	.44	MAX	9.2	MIN	.04	AC-FT	318
WTR YR 1985	TOTAL	273.50	MEAN	.75	MAX	9.1	MIN	.03	AC-FT	542

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

There are 24 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records furnished by Colorado Division of Water Resources. The locations and diversions of 8 selected diversions are given in the following list.

09010000 Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW¼ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.
REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¼ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

09021500 Berthoud Pass ditch diverts water from tributaries of Fraser River between headgate in sec.33, T.2 S., R.75 W., and Berthoud Pass, in Colorado River basin, to Hoop Creek (tributary to West Fork Clear Creek) in sec.10, T.3 S., R.75 W., in Platte River basin.

09042000 Hoosier Pass tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE¼ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW¼NE¼ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW¼SW¼ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

09050590 Harold D. Roberts tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte, River) in SW¼SW¼ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

09063700 Homestake tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.8 S., R.81 W., in Eagle River basin, to Lake Fork in sec.9, T.9 S., R.81 W., in Arkansas River basin. Water is imported to Homestake Lake from tributaries of Homestake Creek by collection conduits that extend from right bank of French Creek in sec.28, T.7 S., R.81 W., and left bank of East Fork Homestake Creek in sec.9, T.8 S., R.81 W., and intercept intermediate tributaries.

09077160 Charles H. Bousted tunnel diverts water from the main stem and tributaries of Fryingpan River (tributary to Roaring Fork River), in Colorado River basin, to Lake Fork in sec.10, T.9 S., R.81 W., in Arkansas River basin. Water is transported to west portal of tunnel (at lat 39°14'44", long 106°31'47"), by a series of collection conduits extending between headgates on right bank of Sawyer Creek at lat 39°15'58", long 106°38'19" and right bank of Fryingpan River at lat 39°14'40", long 106°31'49", and intercepting intermediate tributaries.

09077500 Busk-Ivanhoe tunnel diverts water from Ivanhoe Lake (Ivanhoe Creek), tributary to Fryingpan River in sec.13, T.9 S., R.82 W., in Roaring Fork River basin, to Busk Creek (tributary to Lake Fork) in sec. 20, T.9 S., R.81 W., in Arkansas River basin.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
(SOME PREVIOUSLY UNPUBLISHED DIVERSIONS TO THE ARKANSAS RIVER BASIN ARE INCLUDED IN THIS TABLE)

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
TO PLATTE RIVER BASIN												
09010000	0	0	0	0	0	0	0	1,280	10,540	6,350	2,030	630
Water year 1985, 20,830												
09013000	15,070	14,970	18,100	16,170	20,490	26,480	29,310	33,830	31,910	31,870	26,950	20,020
Water year 1985, 285,200												
09021500	0	0	0	0	0	0	0	0	238	242	72	15
Water year 1985, 567												
09050590	0	0	0	0	0	0	0	0	0	0	0	299
Water year 1985, 299												
TO ARKANSAS RIVER BASIN												
09042000	1,040	0	0	0	0	0	0	798	2,200	1,140	989	1,240
Water year 1985, 7,400												
09063700	0	135	1,090	0	0	2,430	877	0	1,330	2,380	1,800	147
Water year 1985, 10,180												
09077160	0	0	0	0	0	0	0	3,170	39,030	32,170	12,300	771
Water year 1983, 87,440												
09077160	0	0	0	0	0	0	0	21,900	45,770	25,010	12,010	2,950
Water year 1984, 107,600												
09077500	258	0	0	0	0	0	0	113	3,380	4,200	1,230	202
Water year 1983, 9,390												

TRANSMOUNTAIN DIVERSIONS NO LONGER PUBLISHED

Following is a list of Transmountain Diversions no longer being published in this report. Diversions, in acre-feet, for these sites are available from the State of Colorado, Division of Water Resources.

TO PLATTE RIVER BASIN

09012000	Eureka ditch
09022500	Moffat Water tunnel
09046000	Boreas Pass ditch
09047300	Vidler tunnel

TO ARKANSAS RIVER BASIN

09061500	Columbine ditch
09062000	Ewing ditch
09062500	Wurtz ditch
09073000	Twin Lakes tunnel
09115000	larkspur ditch

TO RIO GRANDE BASIN

09118200	Tarbell ditch
09121000	Tabor ditch
09341000	Treasure Pass ditch
09347000	Don LaFont ditches 1&2
09348000	Williams Cr-Squaw Pass ditch
09351000	Pine River-Weminuche Pass ditch
09351500	Weminuche Pass ditch

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations; the second is a table of annual maximum stage and discharge at crest-stage stations; and the third is a table containing discharge measurements made at miscellaneous sites for both low flow and high flow are given in a fourth table.

LOW-FLOW PARTIAL-RECORD STATIONS

Measurements of streamflow in the area covered by this report made at low-flow, partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simulataneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1985

Station no.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Discharge (ft^3/s)
*09058900	Moniger Creek near Minturn, CO	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn.	0.76	1965-85	10-03-84	0.19
					6-19-85	2.57
					7-16-85	.21
					8-13-85	.09
					9-12-85	.04

*Also a crest-stage partial-record station.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1985

Station no.	Station name	Location	Drainage area (mi^2)	Non-contributing	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		PINEY RIVER BASIN						
*09058900	Moniger Creek near Minturn, CO	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn.	0.76	-	1965-85	6-19-85	1.44	2.6 (observed)
		COLORADO RIVER BASIN						
09061450	Sweetwater Creek at mouth near Dotsero, CO	Lat 39°43'20", long 107°02'22", in NW¼NE¼ sec.9, T.4 S., R.86 W., Eagle County, 5.3 mi north of Dotsero.	105	-	1979-85	7-12-85	10.05	700
09091100	Mamm Creek near Silt, CO	Lat 39°43'54", long 107°42'48", in NW¼NW¼ sec.18, T.6 S., R.92 W., Garfield County, 3.3 mi southeast of Silt.	63.3	-	1979-85	unknown	10.80	235
		GUNNISON RIVER BASIN						
09149450	Dry Creek near Olathe, CO	Lat 39°33'19", long 108°02'43", SW¼NE¼ sec. 36, T.50 N., R.11 W., Montrose County, 4.9 mi southwest of Olathe.	102	-	1979-85	unknown	3.08	435

*Also a low-flow partial-record station.

09039000 TROUBLESOME CREEK NEAR PEARMONT, CO. (LAT 40 13 03N LONG 106 18 45W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					APR 1985				
04...	13:45	18	95	8.5	17...	10:00	33	75	4.5
NOV					MAY				
08...	10:40	16	100	1.5	07...	12:30	131	90	8.5
DEC					JUN				
17...	12:30	14	100	0.0	05...	15:45	100	75	12.5
MAR 1985					AUG				
12...	12:45	11	90	1.0	14...	16:15	22	100	18.0

09046490 BLUE RIVER AT BLUE RIVER, CO. (LAT 39 27 21N LONG 106 01 52W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					MAY 1985				
04...	12:20	40	160	8.0	23...	13:25	65	200	7.0
NOV					JUN				
07...	10:25	30	80	3.0	06...	12:55	141	80	9.0
DEC					JUL				
12...	09:30	22	85	2.0	18...	16:40	81	60	11.0
JAN 1985					AUG				
24...	16:10	11	100	2.0	22...	17:35	26	85	8.0
APR									
03...	12:50	8.2	<50	1.5					

09046600 BLUE RIVER NEAR DILLON, CO. (LAT 39 32 55N LONG 106 02 19W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					MAY 1985				
04...	13:45	109	140	8.0	23...	08:45	318	185	6.0
NOV					JUN				
07...	13:50	85	85	3.0	06...	13:50	356	150	6.0
DEC					18...	14:10	194	85	11.0
12...	12:25	55	100	2.0	AUG				
APR 1985					22...	15:15	88	90	9.0
03...	13:50	38	200	2.0					
17...	09:25	102	80	4.0					

09047500 SNAKE RIVER NEAR MONTEZUMA, CO. (LAT 39 36 20N LONG 105 56 33W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					MAY 1985				
02...	11:10	72	80	4.0	06...	11:20	90	75	3.0
NOV					JUN				
06...	12:00	49	80	1.0	07...	10:00	359	54	4.0
DEC					JUL				
17...	12:20	26	120	0.0	23...	11:30	123	70	9.0
JAN 1985					29...	14:10	105	65	9.0
29...	13:00	17	110	0.0	AUG				
MAR					28...	11:45	37	95	8.0
12...	11:20	15	125	0.0					
APR									
10...	17:15	19	105	2.0					

09047700 KEYSTONE GULCH NEAR DILLON, CO. (LAT 39 35 40N LONG 105 58 19W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					MAY 1985				
02...	12:00	6.8	75	5.0	06...	12:30	12	80	4.0
NOV					JUN				
06...	12:15	4.9	80	0.0	07...	13:40	23	62	6.0
DEC					JUL				
17...	13:00	3.6	80	0.0	23...	12:40	8.0	80	10.0
JAN 1985					29...	15:00	6.0	78	10.5
29...	13:40	2.7	80	0.0	AUG				
MAR					28...	17:30	3.5	75	12.0
12...	13:15	2.2	85	0.0					
APR									
10...	12:40	2.5	86	0.5					

09050100 TENMILE CREEK BL NORTH TENMILE C, AT FRISCO, CO. (LAT 39 34 37N LONG 106 06 33

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					APR 1985				
11...	18:30	77	85	6.0	03...	13:50	25	120	1.0
NOV					16...	14:45	116	65	4.0
14...	18:00	86	85	4.0	MAY				
DEC					23...	10:30	287	180	6.0
18...	10:25	24	120	1.5	JUN				
JAN 1985					06...	15:20	440	130	7.0
24...	13:45	26	80	1.0	JUL				
FEB					13...	11:55	196	<50	9.5
27...	14:20	35	120	1.0	AUG				
					22...	11:45	85	85	9.0

SUPPLEMENTAL WATER-QUALAITY DATA FOR GAGING STATIONS

09050700 BLUE RIVER BELOW DILLON, CO. (LAT 39 37 32N LONG 106 03 57W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					APR 1985				
04...	08:15	17	60	8.0	03...	16:35	48	110	1.5
NOV					17...	17:05	316	125	5.0
07...	16:35	15	100	5.0	JUN				
DEC					06...	13:20	660	140	7.0
12...	15:15	104	120	1.5	AUG				
JAN 1985					22...	09:30	444	200	9.0
24...	10:50	98	140	2.0					
FEB									
27...	12:10	12	80	1.0					

09052000 ROCK CREEK NEAR DILLON, CO. (LAT 39 43 23N LONG 106 07 41W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					APR 1985				
04...	14:50	17	41	8.0	09...	17:30	7.7	68	1.5
NOV					MAY				
08...	09:15	11	45	1.0	08...	14:15	57	50	6.0
DEC					JUN				
17...	15:00	7.1	55	0.0	07...	09:15	91	40	8.0
JAN 1985					JUL				
29...	16:20	5.8	70	0.0	25...	13:30	52	32	9.5
MAR					SEP				
12...	16:35	4.7	75	0.0	03...	16:30	14	42	16.0

09052400 BOULDER CREEK AT UPPER STATION, NEAR DILLON, CO. (LAT 39 43 41N LONG 106 10 22

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					APR 1985				
02...	16:00	12	48	7.5	11...	11:45	3.0	72	0.5
NOV					MAY				
06...	15:30	8.0	52	0.0	06...	17:00	32	38	2.5
DEC					JUN				
19...	17:05	5.2	62	0.0	05...	14:00	64	36	6.5
FEB 1985					JUL				
08...	17:20	2.8	65	0.0	23...	16:30	56	40	8.5
MAR					AUG				
12...	17:20	2.4	70	0.0	28...	14:30	9.6	36	14.0

09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, CO. (LAT 39 45 47N LONG 106 11 31W

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					APR 1985				
04...	12:10	21	46	6.0	09...	13:20	5.8	83	0.5
NOV					MAY				
08...	12:45	7.7	50	1.0	08...	11:45	49	51	4.0
DEC					JUN				
20...	13:40	5.4	55	0.0	06...	14:00	120	29	9.0
FEB 1985					JUL				
08...	15:45	3.7	58	0.0	24...	10:40	72	25	9.0
MAR					SEP				
15...	10:45	3.6	75	0.0	04...	14:00	23	35	13.0

09054000 BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, CO. (LAT 39 47 59N LONG 106 16 04W

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					MAY 1985				
03...	15:40	20	27	10.0	09...	10:10	89	35	4.0
NOV					JUN				
20...	11:45	6.8	40	1.5	06...	11:10	155	31	7.0
DEC					20...	13:00	135	29	7.5
20...	10:00	4.6	36	1.5	JUL				
FEB 1985					23...	09:45	138	20	9.0
28...	10:50	2.8	42	0.5	SEP				
MAR					04...	10:20	40	30	14.0
14...	10:30	2.5	41	0.5					
APR									
08...	16:30	3.6	57	2.0					

09055300 CATARACT CREEK NEAR KREMMLING, CO. (LAT 39 50 07N LONG 106 18 57W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					APR 1985				
03...	12:20	11	48	9.0	11...	09:10	4.5	90	1.0
NOV					MAY				
07...	10:30	5.4	50	6.0	07...	14:15	46	65	7.0
DEC					JUN				
18...	11:15	2.8	54	1.0	05...	16:30	107	41	10.0
FEB 1985					JUL				
07...	11:10	2.1	75	1.0	24...	17:20	74	45	11.5
MAR					AUG				
14...	13:50	1.7	76	1.5	29...	10:40	3.9	40	17.0

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
09057500 BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO. (LAT 39 52 49N LONG 106 20 00W									
OCT 1984					MAY 1985				
03...	10:15	319	160	10.0	07...	14:45	501	185	5.0
NOV					JUN				
07...	13:00	424	175	8.5	05...	18:10	804	160	9.0
DEC					JUL				
18...	13:20	541	120	4.0	24...	13:10	1430	145	12.0
MAR 1985					AUG				
14...	14:50	547	160	3.0	29...	13:15	620	157	13.0
APR									
16...	13:00	358	210	3.0					
09058000 COLORADO RIVER NEAR KREMMLING, CO. (LAT 40 02 12N LONG 106 26 22W)									
OCT 1984					JUN 1985				
25...	13:30	957	194	6.5	25...	13:05	2520	250	13.5
NOV					JUL				
21...	12:50	945	180	0.5	31...	13:30	1780	210	15.0
DEC					AUG				
17...	14:40	1020	154	0.5	20...	15:30	1090	200	15.0
MAR 1985					SEP				
01...	12:05	802	175	0.5	11...	13:40	684	230	12.0
28...	15:25	949	243	1.0					
MAY									
21...	17:20	2830	183	--					
09058500 PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO. (LAT 39 42 29N LONG 106 25 38									
OCT 1984					JUN 1985				
03...	15:55	13	<35	10.5	05...	17:20	107	<45	6.0
30...	16:00	10	0	2.5	19...	13:15	116	<40	9.5
DEC					JUL				
12...	14:25	3.8	60	0.5	16...	10:45	34	<45	15.0
JAN 1985					AUG				
23...	13:20	4.1	75	0.0	13...	10:00	13	0	11.5
FEB					SEP				
28...	12:30	2.3	100	0.5	12...	15:00	5.3	60	12.5
APR									
17...	10:40	46	60	4.0					
26...	10:55	18	51	0.5					
09058610 DICKSON CREEK NEAR VAIL, CO. (LAT 39 42 14N LONG 106 27 25W)									
OCT 1984					JUL 1985				
03...	10:55	1.7	300	7.0	16...	14:50	2.8	305	17.0
APR 1985					AUG				
25...	14:30	1.9	290	2.5	06...	14:30	2.2	104	17.0
JUN					SEP				
05...	12:15	10	250	6.0	12...	10:00	1.8	340	7.0
19...	14:10	6.6	260	14.0					
09058700 FREEMAN CREEK NEAR MINTURN, CO. (LAT 39 41 55N LONG 106 26 41W)									
OCT 1984					JUL 1985				
03...	09:50	0.52	185	7.0	16...	12:10	0.84	170	18.0
APR 1985					SEP				
25...	12:25	1.5	120	0.0	12...	11:00	0.36	238	8.0
JUN									
05...	13:10	10	60	6.0					
19...	15:40	4.0	160	15.0					
09058800 EAST MEADOW CREEK NEAR MINTURN CO. (LAT 39 43 54N LONG 106 25 36W)									
OCT 1984					JUL 1985				
03...	12:50	2.6	57	7.0	16...	08:35	3.8	60	7.0
APR 1985					AUG				
24...	11:45	2.1	60	1.0	13...	07:40	2.4	0	8.5
JUN					SEP				
19...	09:55	20	<40	4.0	12...	13:00	1.2	70	5.0
09059500 PINEY RIVER NEAR STATE BRIDGE, CO. (LAT 39 48 00N LONG 106 35 00W)									
OCT 1984					JUL 1985				
04...	12:15	43	245	9.0	01...	15:25	142	120	14.0
APR 1985					17...	08:25	76	210	12.0
18...	14:00	228	210	6.5	AUG				
MAY					08...	10:30	46	240	12.0
14...	19:10	380	210	7.0	SEP				
24...	12:15	474	172	8.0	09...	14:30	24	0	15.0
JUN									
04...	18:00	508	147	10.5					
20...	13:45	322	135	12.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

09060950 BIG ALKALI CREEK BELOW CASTLE CR NEAR BURNS, CO. (LAT 39 51 52N LONG 106 49 01

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					APR 1985				
01...	01:00	--	945	10.0	17...	12:00	28	570	8.0
03...	15:00	3.5	945	10.0	MAY				
NOV					08...	16:00	76	510	13.0
20...	15:00	2.8	1000	0.0	JUN				
DEC					13...	08:00	21	604	9.5
12...	15:00	1.9	910	0.5	28...	10:50	7.1	0	10.5
JAN 1985					JUL				
23...	09:00	2.1	970	0.0	17...	09:00	2.9	1170	12.5
FEB					AUG				
21...	10:00	1.5	920	1.0	21...	13:00	2.4	1220	16.5
MAR					SEP				
13...	12:00	2.3	740	2.0	25...	12:00	1.7	1240	7.5

09063000 EAGLE RIVER AT RED CLIFF, CO. (LAT 39 30 34N LONG 106 22 00W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					MAY 1985				
02...	15:35	28	190	10.0	17...	08:00	128	155	6.0
29...	15:40	29	0	5.0	JUN				
DEC					05...	09:50	217	130	5.0
11...	13:15	17	220	5.0	18...	18:40	154	160	10.0
JAN 1985					JUL				
22...	12:00	15	225	0.0	15...	20:20	42	182	14.0
FEB					AUG				
26...	13:20	14	220	0.5	13...	19:10	24	0	14.0
APR					SEP				
16...	12:40	57	175	1.5	13...	12:00	14	215	7.5

09063200 WEARYMAN CREEK NEAR RED CLIFF, CO. (LAT 39 31 14N LONG 106 19 06W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					MAY 1985				
02...	13:15	6.4	245	1.5	17...	10:20	13	190	3.5
29...	15:10	3.6	0	4.0	JUN				
DEC					18...	16:05	67	205	6.0
11...	10:50	2.7	240	1.0	JUL				
JAN 1985					15...	17:30	13	250	7.0
22...	09:05	1.7	220	0.0	AUG				
FEB					07...	14:15	6.5	270	8.5
26...	09:30	2.0	220	0.5	SEP				
APR					13...	10:00	3.5	265	3.0
16...	09:35	6.4	325	2.0					
30...	16:15	5.6	295	4.5					

09063400 TURKEY CREEK NEAR RED CLIFF, CO. (LAT 39 31 22N LONG 106 20 15W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					MAY 1985				
02...	14:20	13	240	6.5	15...	17:05	49	235	7.0
29...	14:20	11	260	4.0	JUN				
DEC					17...	17:30	161	100	8.0
11...	11:45	6.3	210	1.5	JUL				
JAN 1985					15...	19:00	29	150	13.0
22...	10:20	5.0	240	0.0	AUG				
FEB					07...	16:00	16	250	7.5
26...	10:45	4.2	160	0.5	SEP				
APR					13...	08:00	7.9	275	3.0
16...	10:30	20	190	2.5					

09063900 MISSOURI CREEK NEAR GOLD PARK, CO. (LAT 39 23 25N LONG 106 28 10W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					JUN 1985				
02...	08:30	5.3	<25	3.0	18...	10:25	19	60	4.5
04...	10:15	2.3	34	1.0	JUL				
30...	09:20	5.9	<37	1.0	03...	07:35	45	<25	4.0
NOV					15...	13:15	31	<30	10.0
15...	12:50	2.6	<50	0.0	AUG				
JAN 1985					13...	15:20	7.4	<30	13.0
28...	14:50	1.1	<50	0.0	SEP				
FEB					11...	17:00	4.5	<33	8.5
27...	13:30	0.63	60	0.5					
MAY									
15...	13:30	3.5	55	5.5					

09064000 HOMESTAKE CREEK AT GOLD PARK, CO. (LAT 39 24 20N LONG 106 25 58W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984					JUN 1985				
02...	10:10	21	<28	4.0	06...	14:15	70	<40	7.5
30...	10:45	18	<40	1.0	18...	11:50	57	<40	7.5
JAN 1985					JUL				
28...	13:00	5.3	50	0.0	03...	10:00	98	<35	4.5
FEB					15...	14:30	84	<32	11.0
27...	12:15	7.3	55	0.5	AUG				
APR					13...	16:30	27	<37	14.5
22...	15:40	23	<30	2.5	SEP				
MAY					11...	16:00	14	<40	8.5
15...	16:00	31	<42	7.5					

09064500 HOMESTAKE CREEK NEAR RED CLIFF, CO. (LAT 39 28 24N LONG 106 22 02W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
02...	11:30	30	<39	7.5
30...	12:10	41	50	4.5
DEC				
12...	11:15	19	55	0.5
JAN 1985				
22...	14:00	13	50	0.5
FEB				
26...	15:00	12	55	0.5
APR				
16...	14:50	100	50	4.5
MAY				
13...	17:05	95	<42	6.0
JUN 1985				
18...	12:40	109	<37	10.0
21...	11:40	176	<28	9.0
JUL				
15...	16:10	93	<37	13.0
AUG				
13...	17:40	34	<45	15.5
SEP				
11...	15:00	17	0	8.5
17...	09:00	0.0	<45	5.5

09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO. (LAT 39 37 40N LONG 106 16 24W

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
11...	12:05	20	<50	6.0
NOV				
14...	12:45	17	<50	4.0
DEC				
05...	09:10	8.2	<50	2.0
17...	12:20	10	<50	1.0
JAN 1985				
28...	15:00	8.8	<50	0.5
FEB				
28...	10:50	11	<50	0.5
APR 1985				
18...	11:15	45	60	4.0
MAY				
22...	11:15	59	85	5.0
JUN				
10...	14:25	252	140	7.0
JUL				
17...	11:40	40	<50	9.0
AUG				
21...	16:50	22	<50	8.0

09066000 BLACK GORE CREEK NEAR MINTURN, CO. (LAT 39 35 47N LONG 106 15 52W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
11...	09:40	9.3	<50	6.0
NOV				
15...	17:00	17	<50	2.0
DEC				
17...	11:10	9.7	<50	1.0
JAN 1985				
28...	12:10	3.9	<50	1.0
FEB				
28...	08:10	9.3	<50	1.0
APR 1985				
18...	10:10	26	150	3.0
MAY				
22...	11:50	63	120	5.0
JUN				
10...	12:40	169	120	7.0
JUL				
17...	09:15	17	65	9.0
AUG				
21...	18:10	14	65	7.0

09066100 BIGHORN CREEK NEAR MINTURN, CO. (LAT 39 38 24N LONG 106 17 34W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
11...	14:50	8.9	<50	6.0
NOV				
14...	14:50	5.9	<50	3.0
DEC				
17...	14:35	2.8	<50	1.0
JAN 1985				
29...	08:50	1.5	<50	0.0
FEB				
28...	14:20	2.4	<50	1.0
APR 1985				
04...	14:00	2.4	<50	1.0
18...	13:00	22	<50	3.0
MAY				
22...	09:10	20	85	5.0
JUL				
17...	13:15	11	<50	8.0
AUG				
21...	15:50	4.7	<50	8.0

09066150 PITKIN CREEK NEAR MINTURN, CO. (LAT 39 38 37N LONG 106 18 07W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
12...	13:50	12	<50	6.0
NOV				
15...	09:40	2.6	<50	3.0
DEC				
18...	14:00	3.2	<50	1.5
JAN 1985				
29...	11:15	1.5	<50	0.0
MAR				
01...	08:05	3.9	<50	1.0
APR 1985				
04...	09:40	4.0	<50	1.5
18...	14:25	13	65	2.0
MAY				
22...	13:20	20	70	6.0
JUN				
10...	16:50	129	110	7.5
JUL				
17...	14:50	20	<50	9.0
AUG				
21...	11:50	4.7	<50	7.0

09066200 BOOTH CREEK NEAR MINTURN, CO. (LAT 39 39 02N LONG 106 19 16W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
12...	12:20	8.0	<50	5.0
NOV				
15...	11:35	10	<50	3.0
DEC				
17...	17:20	3.1	<50	0.0
JAN 1985				
29...	14:50	2.1	60	0.0
MAR				
01...	12:20	3.3	50	1.0
APR 1985				
04...	12:45	5.4	75	1.0
18...	15:45	21	120	4.0
MAY				
22...	14:55	22	120	5.0
JUN				
11...	13:40	83	110	6.0
JUL				
17...	15:50	12	<50	9.0
AUG				
21...	08:45	4.8	<50	6.0

09066300 MIDDLE CREEK NEAR MINTURN, CO. (LAT 39 38 50N LONG 106 22 48W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
12...	10:50	4.0	<50	6.0
NOV				
15...	14:15	2.3	<50	4.0
DEC				
18...	16:10	1.1	<50	1.5
JAN 1985				
29...	17:10	1.0	<50	1.0
MAR				
01...	11:10	1.7	<50	1.0
APR 1985				
04...	16:20	2.5	<50	1.0
18...	17:05	10	<50	3.0
MAY				
22...	16:40	21	60	6.0
JUN				
10...	10:25	58	85	8.0
JUL				
17...	17:05	12	<50	8.0
AUG				
21...	14:25	3.9	<50	7.0

09066400 RED SANDSTONE CREEK NEAR MINTURN, CO. (LAT 39 40 58N LONG 106 24 03W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
03...	17:15	4.3	80	6.5
30...	14:25	4.9	50	3.0
DEC				
12...	16:45	2.4	62	0.5
JAN 1985				
23...	10:45	2.0	100	0.0
FEB				
28...	10:20	2.2	110	0.0
APR				
17...	12:15	8.8	85	1.0
JUN 1985				
04...	14:30	67	65	5.0
06...	10:00	73	65	4.5
19...	20:00	48	80	12.0
JUL				
16...	16:05	5.3	90	13.0
AUG				
13...	13:20	3.5	0	13.0
SEP				
12...	17:40	2.6	95	8.5

09070000 EAGLE RIVER BELOW GYPSUM, CO. (LAT 39 38 58N LONG 106 57 11W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
04...	11:00	476	660	10.0
NOV				
28...	12:00	309	790	1.0
DEC				
14...	08:30	0.0	664	0.0
JAN 1985				
23...	13:00	231	820	0.5
FEB				
21...	13:00	217	824	2.0
MAR				
20...	15:00	255	795	8.5
APR 1985				
24...	11:00	720	500	6.0
MAY				
23...	14:00	1710	307	9.0
JUN				
10...	14:00	4900	0	8.5
JUL				
17...	14:00	767	445	17.0
AUG				
21...	08:00	296	890	15.0
SEP				
19...	13:00	312	960	14.0

09070500 COLORADO RIVER NEAR DOTSERO, CO. (LAT 39 38 40N LONG 107 04 40W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
05...	09:00	1960	408	11.5
05...	10:00	1990	408	11.5
NOV				
27...	13:00	1650	345	0.5
MAR 1985				
05...	13:00	1410	388	2.0
21...	10:00	1750	400	5.5
APR				
22...	15:00	3590	324	7.5
MAY				
08...	11:00	9490	280	8.0
JUN 1985				
10...	17:00	11200	0	11.0
25...	11:00	5970	0	9.5
JUL				
15...	14:00	3020	375	19.0
AUG				
19...	15:00	1790	402	18.0
SEP				
26...	11:00	1480	425	9.0

09071300 GRIZZLY CREEK NEAR GLENWOOD SPRINGS, CO. (LAT 39 43 04N LONG 107 18 51W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
01...	14:10	6.0	300	7.0
FEB 1985				
28...	10:00	1.5	308	0.0
MAY				
01...	11:45	8.5	300	0.5
JUN				
07...	12:05	189	205	2.0
JUL 1985				
02...	13:15	34	160	9.0
17...	12:40	11	245	12.0
AUG				
12...	12:30	5.0	145	11.0
SEP				
09...	13:00	2.2	137	10.0

09072550 ROARING FORK RIVER AB LOST MAN C, NEAR ASPEN CO. (LAT 39 07 13N LONG 106 37 27

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
03...	15:15	1.0	62	6.0
NOV				
07...	13:30	0.02	<50	0.0
MAY 1985				
14...	16:35	6.9	<38	0.0
JUN 1985				
04...	13:30	142	<32	4.0
JUL				
23...	15:10	6.4	<28	9.0
SEP				
05...	12:45	1.4	<35	11.0

09073005 LINCOLN CREEK BL GRIZZLY RESERVOIR, NR ASPEN CO. (LAT 39 04 48N LONG 106 36 57

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
03...	16:40	4.0	155	4.5
NOV				
07...	15:25	21	66	1.5
MAR 1985				
26...	11:10	2.2	66	1.0
MAY				
14...	14:05	4.5	69	2.5
JUN 1985				
04...	15:15	178	<48	4.5
25...	15:55	174	<40	6.0
JUL				
23...	17:20	119	<44	8.0
SEP				
05...	14:35	5.2	0	8.0

09073300 ROARING FORK RIVER AB DIFFICULT C NR ASPEN, CO. (LAT 39 08 28N LONG 106 46 25

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
03...	13:25	36	126	6.5
NOV				
07...	12:15	51	<50	2.0
DEC				
18...	10:25	31	86	1.0
JAN 1985				
29...	14:35	21	0	0.0
APR				
23...	09:00	58	62	1.5
MAY 1985				
14...	11:40	84	52	3.0
JUN				
04...	11:45	534	<38	6.0
25...	13:10	622	<32	8.0
JUL				
23...	13:20	257	44	10.0
SEP				
05...	11:20	23	0	7.0

09073400 ROARING FORK RIVER NEAR ASPEN, CO. (LAT 39 10 48N LONG 106 48 05W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
03...	11:25	60	140	5.5
NOV				
07...	10:45	72	70	2.5
DEC				
18...	08:35	46	100	0.0
JAN 1985				
28...	16:30	33	91	0.0
MAR				
12...	12:10	30	97	2.5
APR				
23...	10:10	89	93	2.5
MAY 1985				
13...	16:00	193	87	3.5
JUN				
03...	17:35	672	<40	7.0
25...	11:10	712	<37	8.0
JUL				
24...	09:10	306	56	7.0
SEP				
05...	10:05	51	0	9.5

09074000 HUNTER CREEK NEAR ASPEN, CO. (LAT 39 12 21N LONG 106 47 49W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
03...	08:50	26	112	4.0
NOV				
07...	08:55	30	250	0.5
DEC				
18...	16:05	12	63	0.0
JAN 1985				
29...	16:30	9.8	0	0.0
MAR				
12...	13:45	9.5	87	1.5
APR 1985				
23...	11:25	39	61	4.0
MAY				
14...	10:15	85	53	1.5
JUN				
04...	09:30	134	<40	5.0
JUL				
23...	10:55	56	<44	10.0
SEP				
05...	08:40	14	80	6.0

09074800 CASTLE CREEK ABOVE ASPEN, CO. (LAT 39 05 15N LONG 106 48 42W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
02...	15:15	31	333	9.0
NOV				
06...	15:55	23	378	4.0
DEC				
18...	13:05	20	399	1.5
JAN 1985				
29...	09:00	17	466	0.0
MAR				
12...	10:35	12	450	1.0
APR				
22...	14:40	31	388	6.5
MAY 1985				
13...	13:40	72	339	2.5
JUN				
03...	15:40	137	233	8.5
24...	17:00	253	150	8.0
JUL				
23...	08:30	107	245	6.0
SEP				
06...	08:50	43	231	4.0
30...	14:50	33	365	6.5

09075700 MAROON CREEK ABOVE ASPEN, CO. (LAT 39 07 25N LONG 106 54 17W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
02...	13:55	77	514	8.5
NOV				
06...	13:55	48	0	4.0
JAN 1985				
29...	11:40	26	0	0.0
JUN 1985				
04...	17:30	223	110	6.5
26...	09:00	422	100	7.0
SEP				
04...	15:10	72	410	9.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
09076520 OWL CREEK NEAR ASPEN, CO. (LAT 39 13 25N LONG 106 52 45W)									
OCT 1984 02...	12:05	0.68	546	7.5	MAY 1985 14...	08:25	34	224	1.0
NOV 06...	12:40	1.3	411	2.0	JUN 03...	13:05	25	185	11.0
DEC 18...	14:20	0.83	504	0.5	JUL 22...	13:45	5.1	550	12.0
MAR 1985 12...	08:50	1.3	530	0.0	SEP 04...	13:15	0.65	580	12.0
APR 22...	13:00	19	301	7.0					
09078600 FRYINGPAN RIVER NEAR THOMASVILLE, CO. (LAT 39 20 41N LONG 106 40 23W)									
OCT 1984 11...	14:05	60	--	6.0	FEB 1985 18...	13:50	30	--	0.0
NOV 01...	12:15	64	--	1.5	MAR 07...	12:15	30	--	0.0
20...	16:15	67	--	0.5	APR 03...	11:40	55	--	0.5
DEC 18...	13:15	45	--	0.0	18...	10:00	239	--	1.5
JAN 1985 11...	12:55	35	--	0.5	MAY 09...	12:05	385	--	4.5
30...	14:00	34	--	0.5	23...	12:55	283	--	6.5
09080400 FRYINGPAN RIVER NEAR RUEDI, CO. (LAT 39 21 56N LONG 106 49 30W)									
OCT 1984 04...	09:45	134	389	8.0	APR 1985 23...	14:20	43	286	12.5
NOV 08...	09:15	185	206	7.5	JUN 05...	09:25	408	204	5.0
DEC 17...	15:15	174	143	4.5	26...	11:05	207	200	7.0
JAN 1985 28...	14:30	174	306	4.0	JUL 24...	11:50	333	200	9.5
MAR 11...	14:35	174	350	6.0	SEP 06...	10:55	193	196	9.0
09081600 CRYSTAL RIVER AB AVALANCHE C, NEAR REDSTONE, CO. (LAT 39 13 56N LONG 107 13 36									
OCT 1984 04...	12:10	189	710	8.0	MAY 1985 15...	11:05	672	293	6.0
NOV 08...	11:50	117	420	5.0	JUN 05...	12:15	1570	167	8.0
DEC 19...	10:15	86	609	3.0	17...	14:30	1880	169	10.5
JAN 1985 30...	10:35	63	670	1.0	JUL 24...	14:30	560	227	10.5
MAR 12...	16:15	92	570	4.5	AUG 28...	13:35	145	450	15.5
APR 24...	09:55	357	368	5.0					
09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO. (LAT 39 32 37N LONG 107 19 44W)									
OCT 1984 05...	12:05	1420	480	10.5	MAY 1985 15...	14:05	2910	350	9.0
NOV 08...	14:45	1040	788	7.5	JUN 05...	15:35	4960	245	12.0
DEC 17...	13:10	787	480	3.0	24...	13:50	5780	218	10.5
JAN 1985 28...	12:25	612	560	2.0	JUL 24...	16:50	2620	490	15.0
MAR 11...	12:10	716	640	5.5	AUG 28...	11:45	870	553	14.5
APR 24...	12:20	1750	522	9.5					
09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO. (LAT 39 33 18N LONG 107 20 13W)									
OCT 1984 04...	13:00	2940	830	12.0	MAY 1985 20...	15:00	10200	332	9.0
05...	13:00	2800	--	12.0	JUN 14...	08:00	16600	208	8.5
NOV 30...	09:00	2590	660	2.0	JUL 19...	08:00	5890	1390	15.0
JAN 1985 24...	13:25	2050	785	0.0	AUG 23...	10:00	2760	713	14.5
MAR 07...	09:00	2050	760	3.0	SEP 20...	10:00	2450	880	11.5
22...	12:00	0.0	680	5.0					
APR 25...	08:00	5140	488	6.0					

09085200 CANYON CREEK ABOVE NEW CASTLE, CO. (LAT 39 36 19N LONG 107 24 21W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
23...	10:00	31	285	4.0
NOV				
21...	12:00	19	280	4.0
DEC				
14...	13:00	21	266	4.0
JAN 1985				
24...	10:00	14	314	1.0
FEB				
22...	10:00	15	310	3.0
MAR				
22...	14:00	17	282	8.0
APR				
18...	09:55	88	230	5.0
MAY 1985				
21...	08:00	122	220	5.5
JUN				
13...	15:00	410	2[illegible]	10.0
24...	11:00	266	220	8.0
JUL				
18...	16:00	60	260	15.0
30...	14:00	49	290	14.5
AUG				
22...	15:00	24	328	17.5
SEP				
20...	08:00	19	318	9.5

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO. (LAT 39 19 52N LONG 107 34 46W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
11...	14:00	9.0	480	8.0
NOV				
16...	11:00	8.6	420	0.0
DEC				
20...	13:00	9.0	458	0.0
JAN 1985				
24...	13:30	7.3	525	0.0
MAR				
07...	10:35	7.5	490	0.0
APR				
15...	13:00	158	320	6.0
MAY 1985				
03...	11:00	435	258	4.5
10...	12:00	506	0	6.0
15...	13:00	320	297	10.0
JUN				
05...	12:00	226	0	8.0
JUL				
25...	12:00	30	310	14.0
AUG				
23...	12:00	5.6	534	14.0
SEP				
23...	15:00	7.7	462	9.5

09093000 PARACHUTE CREEK NEAR PARACHUTE CO. (LAT 39 34 01N LONG 108 06 37W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
01...	12:15	21	850	10.5
JAN 1985				
08...	09:20	12	1000	4.5
FEB				
19...	10:35	10	950	5.0
MAR				
19...	10:40	13	875	7.5
APR				
09...	10:30	141	700	8.0
MAY 1985				
03...	12:00	1000	550	11.5
06...	10:15	1500	520	9.0
14...	09:30	743	590	6.0
JUN				
04...	08:50	190	765	8.0
JUL				
12...	11:30	46	890	13.0
AUG				
16...	12:10	32	885	14.0
SEP				
13...	11:45	21	900	11.0

09093700 COLORADO RIVER NEAR DE BEQUE, CO. (LAT 39 21 45N LONG 108 09 07W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
01...	09:55	3220	840	11.0
NOV				
06...	09:25	3160	800	6.5
JAN 1985				
08...	12:30	2870	860	2.0
FEB				
21...	10:30	2380	950	5.0
MAR				
18...	13:00	2760	900	5.0
APR 1985				
09...	12:30	4270	990	11.0
MAY				
06...	11:25	19700	360	12.0
JUN				
21...	12:40	15800	343	15.0
JUL				
15...	14:25	6290	565	21.0
AUG				
20...	14:30	2870	885	20.5

09095526 GOVERNMENT HIGHLINE CA AT 16 ROAD, NR LOMA, CO. (LAT 39 15 25N LONG 108 45 22

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
05...	11:30	282	900	14.5
NOV				
05...	09:35	302	808	7.5
APR 1985				
08...	09:55	211	927	12.0
MAY				
09...	13:55	242	400	14.0
21...	10:30	290	449	12.0
JUN 1985				
03...	09:40	349	403	13.5
JUL				
02...	10:00	--	440	18.5
AUG				
13...	11:30	272	800	19.0
SEP				
10...	11:30	312	1000	17.0

090955285 GOV'T HIGHLINE CA AB CAMP #7 SPILL, NR MACK, CO. (LAT 39 16 21N LONG 108 49 56

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
05...	09:40	247	910	14.0
NOV				
05...	11:30	306	810	8.0
APR 1985				
08...	11:40	210	940	14.0
MAY				
10...	10:20	167	405	12.0
21...	11:40	230	449	14.0
JUN 1985				
03...	11:50	273	398	15.0
JUL				
02...	11:00	149	480	19.0
18...	10:30	207	800	20.5
AUG				
23...	13:30	153	915	22.5
SEP				
10...	10:20	248	1030	17.0

09106104 KIEFER EXTENSION GRAND VALLEY CA NR FRUITA, CO. (LAT 39 13 31N LONG 108 46 28

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984 09...	09:50	135	820	14.0	JUN 1985 13...	07:15	129	318	15.0
NOV 08...	10:45	125	810	7.5	JUL 19...	09:30	123	610	21.0
DEC 12...	12:30	80	910	3.0	AUG 29...	12:30	134	990	22.0
APR 1985 11...	12:10	106	870	13.0	SEP 26...	10:50	123	990	12.5
MAY 09...	15:20	136	405	14.0					
23...	08:30	132	465	14.0					

09106108 KIEFER EXTENSION GRAND VALLEY CANAL NR LOMA, CO. (LAT 39 13 40N LONG 108 49 06

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984 09...	11:00	64	820	14.5	MAY 1985 10...	07:30	77	410	10.0
NOV 05...	12:50	58	840	9.0	23...	11:05	79	485	16.0
DEC 12...	15:50	209	1000	1.5	JUN 13...	08:10	78	305	16.0
APR 1985 11...	13:25	44	870	14.0	JUL 18...	13:00	80	635	23.0
					AUG 29...	14:40	74	995	23.5

09110000 TAYLOR RIVER AT ALMONT, CO. (LAT 38 39 52N LONG 106 50 41W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984 16...	10:25	847	90	7.0	MAY 1985 14...	10:20	856	105	5.0
NOV 27...	09:50	248	90	0.0	JUN 04...	10:30	849	110	8.0
JAN 1985 15...	11:35	91	135	0.0	JUL 09...	11:45	658	95	14.0
FEB 26...	09:20	117	135	0.0	AUG 13...	10:20	297	110	10.0
APR 10...	10:35	421	100	5.5	SEP 17...	10:20	761	85	10.5

09112500 EAST RIVER AT ALMONT CO. (LAT 38 39 52N LONG 106 50 50W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984 16...	08:35	153	275	0.0	MAY 1985 14...	08:30	1040	195	4.0
NOV 27...	08:25	72	205	0.0	JUN 04...	08:20	1580	140	7.0
JAN 1985 15...	08:10	91	210	0.0	JUL 09...	09:20	834	215	11.5
FEB 26...	08:20	78	300	0.0	AUG 13...	08:30	301	225	9.5
APR 10...	08:40	167	245	3.5	SEP 17...	08:05	194	260	9.0

09114500 GUNNISON RIVER NEAR GUNNISON, CO. (LAT 38 32 31N LONG 106 56 57W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984 17...	15:15	963	140	7.0	MAY 1985 15...	15:05	2170	135	10.5
NOV 28...	15:00	402	190	1.5	JUN 05...	15:15	2830	150	12.5
JAN 1985 15...	15:05	171	215	0.0	JUL 11...	13:45	1540	180	16.0
FEB 27...	14:45	212	200	3.0	AUG 14...	15:10	639	208	18.0
APR 11...	15:50	958	175	9.5	SEP 18...	14:40	980	125	11.5

09118450 COCHETOPA CREEK BELOW ROCK CREEK NR PARLIN, CO. (LAT 38 20 08N LONG 106 46 18

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984 15...	15:50	48	180	3.0	MAY 1985 13...	15:25	105	130	9.5
NOV 26...	16:00	39	170	0.0	JUN 03...	14:20	116	150	15.0
JAN 1985 14...	14:55	39	170	0.0	JUL 08...	15:40	44	295	20.0
FEB 25...	15:15	40	180	8.0	AUG 12...	15:30	88	170	18.5
APR 09...	09:30	85	140	0.0	SEP 17...	15:50	34	215	14.0

09119000 TOMICHI CREEK AT GUNNISON, CO. (LAT 38 31 18N LONG 106 56 25W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984 16...	15:50	201	230	5.5	MAY 1985 14...	16:10	881	200	14.0
NOV 27...	14:35	123	220	1.0	JUN 04...	15:45	845	155	21.5
JAN 1985 15...	13:20	106	180	0.0	JUL 09...	15:15	203	290	19.5
FEB 26...	13:45	107	180	3.0	AUG 13...	15:25	197	185	20.5
APR 09...	13:40	486	205	7.5	SEP 16...	15:25	121	270	20.0

09123400 LAKE FORK BELOW MILL GULCH NEAR LAKE CITY, CO. (LAT 37 54 23N LONG 107 23 03W

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984 17...	10:20	52	95	3.0	MAY 1985 15...	09:20	96	90	5.0
NOV 28...	10:05	18	105	2.5	JUN 05...	09:35	453	65	6.0
JAN 1985 16...	10:20	9.4	95	0.0	JUL 10...	10:35	226	70	11.0
FEB 27...	09:55	9.2	95	0.0	AUG 14...	09:40	65	90	12.0
APR 11...	09:45	39	100	5.5	SEP 18...	09:20	63	105	8.0

09124500 LAKE FORK AT GATEVIEW, CO. (LAT 38 17 56N LONG 107 13 46W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984 17...	12:55	155	140	4.0	MAY 1985 15...	12:15	403	140	9.0
NOV 28...	12:35	72	160	0.5	JUN 05...	12:35	1170	85	11.5
JAN 1985 16...	12:40	49	160	0.0	JUL 10...	14:35	735	70	16.0
FEB 27...	11:40	58	165	0.0	AUG 14...	12:20	218	115	18.5
APR 11...	13:20	190	155	8.0	SEP 18...	11:45	154	130	12.0

09126000 CIMARRON RIVER NEAR CIMARRON, CO. (LAT 38 15 45N LONG 107 32 39W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984 18...	11:05	110	75	6.5	MAY 1985 16...	09:20	211	90	5.0
NOV 29...	10:30	27	120	1.5	JUN 06...	09:20	711	70	8.5
JAN 1985 17...	10:00	32	120	0.0	JUL 12...	09:55	199	60	11.5
FEB 28...	09:25	29	105	0.0	AUG 15...	09:25	121	70	14.0
APR 12...	10:00	40	115	3.0	SEP 19...	09:20	42	85	11.0

09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO. (LAT 38 31 45N LONG 107 38 54W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984 22...	14:00	1800	170	10.5	MAY 1985 17...	09:50	2530	160	9.5
NOV 30...	10:15	1950	170	2.0	JUN 07...	10:15	3490	125	13.0
JAN 1985 18...	10:05	2700	215	2.5	JUL 19...	11:45	1550	125	14.0
MAR 01...	10:10	2910	165	4.5	AUG 16...	10:15	1250	150	14.5
APR 17...	11:00	3860	180	8.0	SEP 20...	10:00	1450	165	13.0

09128500 SMITH FORK NEAR CRAWFORD, CO. (LAT 38 43 40N LONG 107 30 22W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984 10...	10:50	13	184	7.5	MAY 1985 08...	13:55	506	89	8.5
NOV 09...	12:20	15	165	2.5	JUN 06...	12:30	222	85	9.5
DEC 12...	13:30	11	184	1.5	JUL 01...	13:00	45	108	11.0
FEB 1985 01...	08:40	8.3	0	0.0	16...	14:10	20	138	19.0
MAR 13...	15:25	21	200	5.5	AUG 29...	08:55	5.2	0	14.5
APR 19...	11:40	268	108	3.5					

09129600 SMITH FORK NEAR LAZEAR, CO. (LAT 38 42 27N LONG 107 42 35W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
09...	14:15	6.3	4980	16.5
NOV				
09...	14:30	5.3	2730	6.5
DEC				
12...	12:15	8.1	2390	4.0
12...	14:05	4.1	2880	6.0
JAN 1985				
31...	10:50	8.0	1470	0.0
MAR				
14...	09:05	57	1220	3.0
APR 1985				
19...	14:10	398	400	6.0
26...	10:45	218	510	10.0
MAY				
08...	11:55	582	370	7.0
17...	12:00	229	635	10.0
JUN				
06...	14:15	130	671	16.5
JUL				
02...	13:05	24	1680	22.0
25...	13:50	7.6	2510	24.0
AUG				
29...	10:00	3.7	0	18.0

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO. (LAT 38 55 45N LONG 107 26 53W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
09...	12:15	244	0	11.0
NOV				
09...	10:35	130	165	2.0
DEC				
13...	12:45	104	0	0.0
JAN 1985				
31...	13:15	60	190	0.0
MAR				
13...	13:50	287	230	5.0
APR 1985				
25...	16:35	1940	260	7.5
MAY				
06...	13:35	3610	128	8.5
JUN				
06...	10:45	2690	100	8.5
JUL				
03...	11:15	801	105	12.0
25...	11:05	374	165	14.0

09135900 LEROUX CREEK AT HOTCHKISS, CO. (LAT 38 47 53N LONG 107 43 53W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
01...	13:35	13	1260	14.0
12...	14:15	16	1170	14.0
NOV				
05...	14:50	31	0	8.0
DEC				
12...	11:05	24	998	6.0
JAN 1985				
25...	14:55	17	1120	5.0
FEB				
01...	10:35	12	0	0.0
13...	13:50	14	971	6.0
MAR				
14...	10:20	15	1080	5.5
APR 1985				
25...	13:05	79	258	5.0
MAY				
09...	14:15	308	220	7.0
JUN				
07...	12:35	104	270	13.0
JUL				
01...	11:05	6.1	0	14.0
16...	11:00	4.1	1530	17.0
AUG				
29...	11:15	5.6	1650	16.5

09136200 GUNNISON RIVER NEAR LAZEAR, CO. (LAT 38 46 59N LONG 107 50 14W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
01...	12:20	1500	987	14.0
NOV				
05...	13:45	2220	920	8.0
JAN 1985				
31...	15:40	2970	0	2.5
APR				
25...	11:15	6590	330	10.0
MAY 1985				
09...	11:35	10200	195	7.0
JUL				
02...	11:20	2600	820	14.0
AUG				
02...	11:15	1640	1070	17.5

09137050 CURRANT CREEK NEAR READ, CO. (LAT 38 47 05N LONG 107 56 18W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
12...	08:55	9.4	3190	11.5
NOV				
30...	13:00	11	2880	4.5
JAN 1985				
18...	12:50	14	2990	0.5
FEB				
28...	14:55	12	2940	8.5
APR				
16...	08:35	168	510	7.5
MAY 1985				
02...	09:30	144	540	9.0
08...	09:30	163	450	9.0
17...	12:45	52	915	14.5
JUN				
26...	09:20	7.8	2290	14.5
AUG				
07...	09:35	3.4	4330	19.0
SEP				
10...	09:15	3.5	3810	13.5

09143000 SURFACE CREEK NEAR CEDAREDGE, CO. (LAT 38 59 05N LONG 107 51 13W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
11...	09:45	8.6	120	5.5
DEC				
03...	11:45	7.3	160	0.0
MAR 1985				
05...	10:50	6.8	130	0.0
MAY				
08...	11:30	186	95	7.0
28...	12:05	254	75	7.5
JUN 1985				
06...	14:10	221	55	0.0
24...	12:45	140	65	12.5
AUG				
06...	10:30	79	75	15.0
SEP				
09...	11:35	56	70	15.0

09143500 SURFACE CREEK AT CEDAREDGE, CO. (LAT 38 54 06N LONG 107 55 14W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
11...	11:50	10	160	9.5
DEC				
03...	13:45	7.2	185	0.0
JAN 1985				
21...	12:05	3.6	180	0.0
MAR				
05...	13:15	6.0	190	0.5
15...	13:20	106	95	8.5
MAY 1985				
08...	13:35	206	90	9.0
28...	14:20	199	85	11.5
JUN				
25...	10:50	70	70	12.5
AUG				
06...	12:15	26	85	17.0
SEP				
09...	13:40	27	70	16.0

09144200 TONGUE CREEK AT CORY, CO. (LAT 38 47 16N LONG 107 59 41W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
12...	10:45	69	1340	12.0
DEC				
03...	14:55	46	1310	4.5
JAN 1985				
21...	13:35	50	1170	4.0
MAR				
06...	11:10	42	950	6.0
APR				
15...	16:45	325	325	13.0
MAY 1985				
01...	12:55	367	375	11.0
08...	15:30	401	340	12.5
29...	09:45	468	265	10.5
JUN				
25...	13:50	48	1160	21.5
AUG				
07...	10:55	26	1440	20.5
SEP				
10...	10:30	35	1580	15.5

09144250 GUNNISON RIVER AT DELTA, CO. (LAT 38 45 01N LONG 108 04 06W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
10...	10:00	2680	710	12.5
DEC				
04...	09:35	2700	640	4.5
JAN 1985				
22...	07:20	3580	435	4.5
MAR				
06...	12:30	3600	345	6.5
APR				
16...	13:30	8360	330	9.0
MAY 1985				
09...	08:40	11200	235	8.5
30...	11:45	8760	235	10.5
JUL				
03...	08:45	3490	405	15.0
AUG				
07...	12:30	1660	700	19.0
SEP				
10...	11:20	1460	1020	15.0

09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, CO. (LAT 38 11 02N LONG 107 44 43W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
NOV 1984				
14...	11:15	100	420	5.5
DEC				
19...	10:35	64	700	2.0
JAN 1985				
21...	13:00	51	790	5.0
MAR				
13...	15:15	80	650	6.0
MAY				
07...	07:25	446	333	5.0
29...	09:15	696	204	7.0
JUN 1985				
12...	11:15	1120	207	8.5
JUL				
09...	14:00	494	526	17.0
AUG				
06...	11:10	232	578	16.0
SEP				
11...	14:10	95	825	12.0

09147000 DALLAS CREEK NEAR RIDGWAY, CO. (LAT 38 10 40N LONG 107 45 28W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
NOV 1984				
14...	12:15	34	400	4.0
DEC				
19...	11:25	29	540	0.0
JAN 1985				
21...	12:05	23	640	0.0
MAR				
13...	13:45	49	437	2.0
MAY				
07...	08:10	166	410	5.0
29...	07:40	156	353	7.0
JUN 1985				
13...	12:15	136	312	12.0
JUL				
09...	14:15	125	549	17.0
AUG				
06...	11:35	74	520	13.0
SEP				
11...	13:25	36	689	11.0

09147500 UNCOMPAHGRE RIVER AT COLONA, CO. (LAT 38 19 53N LONG 107 46 44W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)
OCT 1984				
19...	09:55	259	630	4.0
NOV				
29...	14:55	153	630	4.5
JAN 1985				
17...	13:25	86	795	0.5
FEB				
28...	12:30	85	825	4.0
APR				
08...	13:30	501	560	0.0
17...	14:15	922	420	11.0
MAY 1985				
07...	10:55	1180	290	10.5
16...	13:15	849	420	10.5
30...	10:00	1310	180	8.5
JUN				
11...	11:00	1860	215	10.0
JUL				
02...	11:00	847	290	13.0
AUG				
15...	13:55	202	640	19.5
SEP				
19...	12:00	311	560	13.5

09149500 UNCOMPAHGRE RIVER AT DELTA, CO. (LAT 38 44 31N LONG 108 04 49W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
10...	13:50	454	1410	17.0
NOV				
30...	14:25	194	1650	6.5
JAN 1985				
21...	14:55	123	1900	4.5
MAR				
01...	13:20	159	1800	9.0
APR				
10...	09:00	1410	695	7.5
16...	12:20	2000	430	12.5
MAY 1985				
02...	11:45	1320	535	13.5
29...	13:45	1110	615	18.5
JUN				
11...	13:45	1510	635	18.5
26...	13:15	776	925	17.5
AUG				
08...	12:45	218	1640	0.0
SEP				
11...	10:00	387	1310	15.0

09151500 ESCALANTE CREEK NEAR DELTA, CO. (LAT 38 45 24N LONG 108 15 34W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
09...	13:00	20	470	15.0
DEC				
04...	13:15	17	450	2.0
JAN 1985				
22...	12:00	18	480	4.0
MAR				
06...	15:50	17	385	0.0
26...	10:15	78	245	7.5
APR				
11...	12:00	459	182	7.0
18...	11:45	656	105	8.5
MAY 1985				
02...	14:35	612	155	0.0
09...	13:35	623	170	10.5
31...	10:00	147	205	14.5
JUN				
28...	11:05	13	440	19.5
AUG				
08...	10:35	2.3	750	23.0
SEP				
11...	12:35	1.2	740	16.5

09153290 REED WASH NEAR MACK, CO. (LAT 39 12 41N LONG 108 48 11W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
OCT 1984				
09...	13:35	80	1580	15.0
NOV				
08...	08:15	65	1560	7.5
DEC				
03...	10:15	6.9	4400	4.5
JAN 1985				
09...	08:15	5.8	4500	5.0
MAR				
19...	07:10	3.2	4500	8.0
APR				
12...	07:50	64	1050	11.5
MAY 1985				
10...	09:35	77	1050	13.0
23...	10:00	59	1300	14.0
JUN				
13...	09:10	83	945	15.5
JUL				
19...	08:05	67	1450	19.0
AUG				
30...	10:15	82	1720	18.5
SEP				
18...	09:20	65	1870	15.5

09163570 HAY PRESS C AB FRUITA RES #3, NR GLADE PARK, CO. (LAT 38 51 03N LONG 108 46 56

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE (DEG C)
NOV 1984				
16...	11:40	0.13	60	0.0
JAN 1985				
03...	11:20	0.13	160	4.0
FEB				
21...	11:25	0.18	160	0.5
APR				
04...	10:40	0.24	90	0.0
15...	08:35	1.7	<40	0.5
MAY				
06...	12:35	5.0	<40	1.0
08...	10:20	5.4	<45	2.0
MAY 1985				
08...	15:55	6.2	57	3.0
08...	17:00	7.2	55	3.0
21...	10:35	6.7	60	3.0
28...	10:25	4.7	62	5.0
31...	10:20	3.4	60	4.0
JUN				
11...	11:00	1.4	<47	9.5
JUL				
12...	11:10	0.17	<40	16.0
AUG				
01...	09:45	0.1	112	12.0
29...	13:05	0.05	0	18.0

400248105560301 SB 1-76-18DBC. W. F. Linke. Drilled recreation water-table well in Middle Park Formation. Diameter, 6 in. Depth, 603 ft. MP, 6.0 ft above lsd. Elevation of land surface, 8,075 ft. Records available: 1973-81, 1983-85

Highest water level, 3.4 ft below lsd, Aug. 28, 1974; lowest water level, 76.25 ft below lsd, Aug. 11, 1977.

Aug. 8, 1985	3.58 ft

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons